

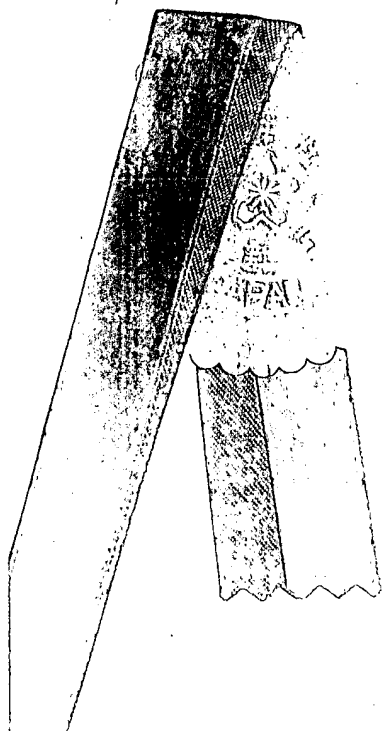
# 分 冊

Separate Volume

出願番号 特願2003-102207

[ST.10/C] : [JP2003-102207]

分冊番号 3/9



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出証番号 出証特2004-3059661

&lt;210&gt; 2792

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2792

Met Gly Ile Arg Gln Gln Leu Arg Leu Pro Thr Arg Thr Ala Gln Pro

1 5 10 15

Leu Thr Ser Leu Pro Cys Pro Arg Lys Thr Arg Ala Pro Ser Arg Leu

20 25 30

Glu Ala Val Ala Ala Ile Ala Gly Thr Glu Pro Ala Ser Ser Ser Pro

35 40 45

Thr Met Pro Leu Pro Leu Met Ala Pro Ser Glu Lys Leu Leu Ser Pro

50 55 60

Pro Glu Thr Ser Arg Asp Phe Arg Ser Pro Pro Pro Leu Pro Pro Arg

65 70 75 80

Leu Arg Glu Ile Pro Gln Pro Gln Gln His Arg Gly Pro Glu Arg Gly

85 90 95

Val Pro Ala Pro Arg Ala Pro Cys His Pro Pro Trp Leu Ser Pro Gly

100 105 110

Arg Pro Pro Arg Ser Pro Asp Pro Ala Leu His Pro Leu Ala Leu Pro

115 120 125

Ser Pro Leu Trp Gly Asp Ser Gly Val Thr Gly Lys Lys Val Lys Gly

130 135 140

Ala Gly Gly Gly Gly Trp Gly Lys Gly Phe Phe

145 150 155

&lt;210&gt; 2793

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2793

Met Leu Arg Ala Gln Glu Gly Cys Glu Gly Cys Val Cys Val Cys Val

1 5 10 15

Cys Val Cys Val Leu Cys Val Ser Val Cys Val Cys Val Cys Leu Cys

20 25 30

Val Cys Val Cys Val Cys Val Cys Leu Cys Leu Cys Val Leu Ser Val

35 40 45

Ser Val Cys Leu Cys Val Cys Val Ser Val Cys Leu Cys Val Cys Leu

50 55 60

Val Ser Val Cys Leu Cys Val Cys Leu Cys Val Cys Val Ser Val Cys

65 70 75 80

Leu Cys Val Cys Leu His Leu Cys Val Cys Val Cys Gly Phe Val Cys

85 90 95

Leu Cys Leu Cys Val Cys Val Cys Leu Cys Val Cys Val Cys Leu His

100 105 110

Leu Cys Val Cys Val Gly Leu Cys Val Ser Val Cys Phe Cys Val Ser

115 120 125

Val Cys Val Cys Leu Cys Val Cys Val Cys Ile Cys Val Phe Val Cys

130 135 140

Val Trp Val Cys Val Cys Leu Cys Val Cys Val Cys Leu Cys Val Cys

145 150 155 160

Leu Cys Leu Cys Val Phe Leu Cys Val Cys Val Phe Val Ser Val Cys

165 170 175

Val Ser Val Cys Val Cys Val Cys Met Cys Ile Gly Arg Thr Val Val

180

185

190

Pro Ala Pro Gln Gly His Gln Ala Leu

195

200

&lt;210&gt; 2794

&lt;211&gt; 1176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2794

Met Asp Ala Pro Gln Ala Ser Pro Ile Ser Pro His Phe Pro Gln Asp

1

5

10

15

Thr Arg Asp Gly Leu Gly Leu Pro Val Gly Ser Lys Asn Leu Gly Gln

20

25

30

Met Asp Thr Ser Arg Gln Gly Gly Trp Gly Ser His Ala Gly Pro Gly

35

40

45

Asn His Val Gln Leu Arg Gly Asn Leu Ala Asn Ser Asn Met Met Trp

50

55

60

Gly Ala Pro Ala Gln Ala Glu Pro Thr Asp Gly Tyr Gln Tyr Thr Tyr

65

70

75

80

Ser Gln Ala Ser Glu Ile Arg Thr Gln Lys Leu Thr Ser Gly Val Leu

85

90

95

His Lys Leu Asp Ser Phe Thr Gln Val Phe Ala Asn Gln Asn Leu Arg

100

105

110

Ile Gln Val Asn Asn Met Ala Gln Val Leu His Thr Gln Ser Ala Val

115

120

125

Met Asp Gly Ala Pro Asp Ser Ala Leu Arg Gln Leu Leu Ser Gln Lys



130 135 140  
Pro Met Glu Pro Pro Ala Pro Ala Ile Pro Ser Arg Tyr Gln Gln Val  
145 150 155 160  
Pro Gln Gln Pro His Pro Gly Phe Thr Gly Gly Leu Ser Lys Pro Ala  
165 170 175  
Leu Gln Val Gly Gln His Pro Thr Gln Gly His Leu Tyr Tyr Asp Tyr  
180 185 190  
Gln Gln Pro Leu Ala Gln Val Pro Val Gln Gly Gly Gln Pro Leu Gln  
195 200 205  
Ala Pro Gln Met Leu Ser Gln His Met Gln Gln Met Gln Gln His Gln  
210 215 220  
Tyr Tyr Pro Pro Gln Gln Gln Gln Gln Ala Gly Gln Gln Arg Ile Ser  
225 230 235 240  
Met Gln Glu Ile Gln Thr Gln Pro Gln Gln Ile Arg Pro Ser Gln Pro  
245 250 255  
Gln Pro Pro Pro Gln Gln Gln Gln Pro Gln Gln Leu Gln Leu Gln Gln  
260 265 270  
Arg Gln Gly Ser Met Gln Ile Pro Gln Tyr Tyr Gln Pro Gln Pro Met  
275 280 285  
Met Gln His Leu Gln Glu Gln Gln Gln Gln Met His Leu Gln Pro  
290 295 300  
Pro Ser Tyr His Arg Asp Pro His Gln Tyr Thr Pro Glu Gln Ala His  
305 310 315 320  
Thr Val Gln Leu Ile Pro Leu Gly Ser Met Ser Gln Tyr Tyr Tyr Gln  
325 330 335  
Glu Pro Gln Gln Pro Tyr Ser His Pro Leu Tyr Gln Gln Ser His Leu  
340 345 350  
Ser Gln His Gln Gln Arg Glu Asp Ser Gln Leu Lys Thr Tyr Ser Ser  
355 360 365

Asp Arg Gln Ala Gln Ala Met Leu Ser Ser His Gly Asp Leu Gly Pro  
 370 375 380  
 Pro Asp Thr Gly Met Gly Asp Pro Ala Ser Ser Asp Leu Thr Arg Val  
 385 390 395 400  
 Ser Ser Thr Leu Pro His Arg Pro Leu Leu Ser Pro Ser Gly Ile His  
 405 410 415  
 Leu Asn Asn Met Gly Pro Gln His Gln Gln Leu Ser Pro Ser Ala Met  
 420 425 430  
 Trp Pro Gln Met His Leu Pro Asp Gly Gly Ala Gln Pro Gly Ser Pro  
 435 440 445  
 Glu Ser Ser Gly Gln Pro Lys Gly Ala Phe Gly Glu Gln Phe Asp Ala  
 450 455 460  
 Lys Asn Lys Leu Thr Cys Ser Ile Cys Leu Lys Glu Phe Lys Asn Leu  
 465 470 475 480  
 Pro Ala Leu Asn Gly His Met Arg Ser His Gly Gly Met Arg Ala Ser  
 485 490 495  
 Pro Asn Leu Lys Gln Glu Glu Gly Glu Lys Val Leu Pro Pro Gln Pro  
 500 505 510  
 Gln Pro Pro Leu Pro Pro Pro Pro Pro Pro Pro Pro Pro Gln Leu  
 515 520 525  
 Pro Pro Glu Ala Glu Ser Leu Thr Pro Met Val Met Pro Val Ser Val  
 530 535 540  
 Pro Val Lys Leu Leu Pro Pro Lys Pro Ser Ser Gln Gly Phe Thr Asn  
 545 550 555 560  
 Ser Thr Val Ala Ala Pro Ser Ala Arg Asp Lys Pro Ala Ser Ser Met  
 565 570 575  
 Ser Asp Asp Glu Met Pro Val Leu Val Arg Met Thr Leu Ser Pro Pro  
 580 585 590  
 His Ser Pro Gln Gly Ala Ala Pro Arg Thr Pro Ala Glu Ile Pro Arg

595 600 605  
Lys His Gln Pro Ser Val Pro Lys Ala Glu Glu Pro Leu Lys Thr Val  
610 615 620  
Gln Glu Lys Lys Lys Phe Arg His Arg Pro Glu Pro Leu Phe Ile Pro  
625 630 635 640  
Pro Pro Pro Ser Tyr Asn Pro Asn Pro Ala Ala Ser Tyr Ser Gly Ala  
645 650 655  
Thr Leu Tyr Gln Ser Gln Leu Arg Ser Pro Arg Val Leu Gly Asp His  
660 665 670  
Leu Leu Leu Asp Pro Thr His Glu Leu Pro Pro Tyr Thr Pro Pro Pro  
675 680 685  
Met Leu Ser Pro Val Arg Gln Gly Ser Gly Leu Phe Ser Asn Val Leu  
690 695 700  
Ile Ser Gly His Gly Pro Gly Ala His Pro Gln Leu Pro Leu Thr Pro  
705 710 715 720  
Leu Thr Pro Thr Pro Arg Val Leu Leu Cys Arg Ser Asn Ser Ile Asp  
725 730 735  
Gly Ser Asn Val Thr Val Thr Pro Gly Pro Gly Glu Gln Thr Val Asp  
740 745 750  
Val Glu Pro Arg Ile Asn Ile Gly Leu Arg Phe Gln Ala Glu Ile Pro  
755 760 765  
Glu Leu Gln Asp Ile Ser Ala Leu Ala Gln Asp Thr His Lys Ala Thr  
770 775 780  
Leu Val Trp Lys Pro Trp Pro Glu Leu Glu Asn His Asp Leu Gln Gln  
785 790 795 800  
Arg Val Glu Asn Leu Leu Asn Leu Cys Cys Ser Ser Ala Leu Pro Gly  
805 810 815  
Gly Gly Thr Asn Ser Glu Phe Ala Leu His Ser Leu Phe Glu Ala Lys  
820 825 830

Gly Asp Val Met Val Ala Leu Glu Met Leu Leu Leu Arg Lys Pro Val  
835 840 845  
Arg Leu Lys Cys His Pro Leu Ala Asn Tyr His Tyr Ala Gly Ser Asp  
850 855 860  
Lys Trp Thr Ser Leu Glu Arg Lys Leu Phe Asn Lys Ala Leu Ala Thr  
865 870 875 880  
Tyr Ser Lys Asp Phe Ile Phe Val Gln Lys Met Val Lys Ser Lys Thr  
885 890 895  
Val Ala Gln Cys Val Glu Tyr Tyr Tyr Thr Trp Lys Lys Ile Met Arg  
900 905 910  
Leu Gly Arg Lys His Arg Thr Arg Leu Ala Glu Ile Ile Asp Asp Cys  
915 920 925  
Val Thr Ser Glu Glu Glu Glu Glu Leu Glu Glu Glu Glu Glu Glu Asp  
930 935 940  
Pro Glu Glu Asp Arg Lys Ser Thr Lys Glu Glu Glu Ser Glu Val Pro  
945 950 955 960  
Lys Ser Pro Glu Pro Pro Pro Val Pro Val Leu Ala Pro Thr Glu Gly  
965 970 975  
Pro Pro Leu Gln Ala Leu Gly Gln Pro Ser Gly Ser Phe Ile Cys Glu  
980 985 990  
Met Pro Asn Cys Gly Ala Val Phe Ser Ser Arg Gln Ala Leu Asn Gly  
995 1000 1005  
His Ala Arg Ile His Gly Gly Thr Asn Gln Val Thr Lys Ala Arg Gly  
1010 1015 1020  
Ala Ile Pro Ser Gly Lys Gln Lys Pro Gly Gly Thr Gln Ser Gly Tyr  
1025 1030 1035 1040  
Cys Ser Val Lys Ser Ser Pro Ser His Ser Thr Thr Ser Gly Glu Thr  
1045 1050 1055  
Asp Pro Thr Thr Ile Phe Pro Cys Lys Glu Cys Gly Lys Val Phe Phe

1060	1065	1070	
Lys Ile Lys Ser Arg Asn Ala His Met Lys Thr His Arg Gln Gln Glu			
1075	1080	1085	
Glu Gln Gln Arg Gln Lys Ala Gln Lys Ala Ala Phe Ala Ala Glu Met			
1090	1095	1100	
Ala Ala Thr Ile Glu Arg Thr Thr Gly Pro Val Gly Ala Pro Gly Leu			
1105	1110	1115	1120
Leu Pro Leu Asp Gln Leu Ser Leu Ile Lys Pro Ile Lys Asp Val Asp			
1125	1130	1135	
Ile Leu Asp Asp Asp Val Val Gln Gln Leu Gly Gly Val Met Glu Glu			
1140	1145	1150	
Ala Glu Val Val Asp Thr Asp Leu Leu Leu Asp Asp Gln Asp Ser Val			
1155	1160	1165	
Leu Leu Gln Gly Asp Ala Glu Leu			
1170	1175		

&lt;210&gt; 2795

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2795

Met Ala Leu Pro Val Pro Leu Cys Leu Arg Pro Glu Thr Ser Pro Pro			
1	5	10	15
Ser Val Leu Ala Met Ala Arg Leu Leu Arg Arg Pro Ser Arg Cys Phe			
20	25	30	
Ser Ala Leu Leu Gly Ser Ser Arg Leu Ala Ser Ala Pro Pro Ile Gly			
35	40	45	

Leu Gly Phe Ser Gly Ser Ser Arg Pro Thr Ser Ala Pro Thr Thr Arg  
 50 55 60  
 Leu Trp Leu Pro Ser Pro Ser Leu Gly Phe Ser Ala Ala Pro Arg Leu  
 65 70 75 80  
 Ser Ser Phe Ser Ser Ala Phe Pro Ala Arg Leu Gln Phe Ser Pro Ile  
 85 90 95  
 Ser Pro Leu Gln Phe Gly Ser Phe Arg Val Ser Pro Trp His Pro Gly  
 100 105 110  
 Leu Gly Val Ala Leu Gly Leu Val Gly Ser Leu Ser  
 115 120

&lt;210&gt; 2796

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2796

Met His Ser Val Ala His Pro His Pro Gly Val Pro Pro Trp Val Pro  
 1 5 10 15  
 Ala Thr Leu Ile Ile Thr Gly Lys Gly Arg Gly Ala Ala Ala Gly Gly  
 20 25 30  
 Ala Gly Leu Glu His Gly Gly Ser Gly Arg Ala His Leu Arg Glu Val  
 35 40 45  
 Ser Ala Glu Thr Trp Arg Thr Arg Gly Val Gly Ala Gly Arg Leu Val  
 50 55 60  
 Thr Gly Pro Ala Leu Ala Ser Gly Pro Pro Cys Ser Gln Leu Tyr Asn  
 65 70 75 80  
 Gly Gln Gly Ser Pro Arg Thr Ile Ser Trp Gly Leu Gly His Thr Arg

	85	90	95
Val Gly Val Ala Ser Leu Leu Met Leu Glu Ser Leu Ser Gly Leu Ala			
100	105	110	
Leu Trp Phe Ser Pro Pro Pro Ala Ala Ser Arg Thr Pro Gly Pro Gly			
115	120	125	
Leu Ser Leu Tyr Thr Asp Gly Ser Lys Ala Trp Gly Gly Ala Pro Gln			
130	135	140	
Glu His Gly Gly Ala His Ala Ser Leu Thr His Ser Gln Val Ser Pro			
145	150	155	160
Pro Gly Ser Gly Asn Leu Thr Gln His Gly His Val Cys Pro Cys Val			
165	170	175	
Thr Met Pro Ala Leu Lys Thr Thr Pro Pro Phe Leu Ser Pro His Arg			
180	185	190	
Gly Leu Asp Ala Ala Ser Trp Ala Gln Ile His Gln Lys Leu Arg Asp			
195	200	205	
Phe Ser Arg Ser Thr Gln Val Gly Gly Lys Gly Trp Pro Arg Pro Ile			
210	215	220	
Leu Thr Pro Cys Pro Ser Ser Trp Leu Thr Ser Pro Cys Gln Ala Glu			
225	230	235	240
Leu Glu Arg Glu Arg Ala Gln Leu Leu Val Arg Ala Thr Met Ala Glu			
245	250	255	
Glu Gln Leu Ser Glu Leu Gln Glu Tyr Val Asp Gln His Leu Gly Arg			
260	265	270	
Trp Ala Glu Gly Ala Gly Cys Asp Pro Arg Ala Leu Val Trp Leu Glu			
275	280	285	

&lt;210&gt; 2797

&lt;211&gt; 1375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2797

Met Asn Ser Gly Asn Asn Ala Ser Gly Val Ser Gly Lys Gly Ala Ala  
1 5 10 15  
Trp Gly Val Leu Leu Val Gly Gly Pro Gly Ser Gly Lys Thr Ala Leu  
20 25 30  
Cys Thr Glu Leu Leu Trp Pro Ser Ser Pro Ala Ser Leu Gln Arg Gly  
35 40 45  
Leu His Arg Gln Ala Leu Ala Phe His Phe Cys Lys Ala Gln Asp Ser  
50 55 60  
Asp Thr Leu Cys Val Gly Gly Phe Ile Arg Gly Leu Val Ala Gln Ile  
65 70 75 80  
Cys Arg Ser Gly Leu Leu Gln Gly Tyr Glu Asp Lys Leu Arg Asp Pro  
85 90 95  
Ala Val Gln Ser Leu Leu Gln Pro Gly Glu Cys Glu Arg Asn Pro Ala  
100 105 110  
Glu Ala Phe Lys Arg Cys Val Leu Leu Pro Leu Leu Gly Met Lys Pro  
115 120 125  
Pro Gln Gln Ser Leu Tyr Leu Leu Val Asp Ser Val Asp Glu Gly Cys  
130 135 140  
Asn Ile Thr Glu Gly Glu Gln Thr Ser Thr Ser Leu Ser Gly Thr Val  
145 150 155 160  
Ala Ala Leu Leu Ala Gly His His Glu Phe Phe Pro Pro Trp Leu Leu  
165 170 175  
Leu Leu Cys Ser Ala Arg Lys Gln Ser Lys Ala Val Thr Lys Met Phe  
180 185 190  
Thr Gly Phe Arg Lys Ile Ser Leu Asp Asp Leu Arg Lys Ala Tyr Ile



195	200	205	
Val Lys Asp Val Gln Gln Tyr Ile Leu His Arg Leu Asp Gln Glu Glu			
210	215	220	
Ala Leu Arg Gln His Leu Thr Lys Glu Thr Ala Glu Met Leu Asn Gln			
225	230	235	240
Leu His Ile Lys Ser Ser Gly Cys Phe Leu Tyr Leu Glu Arg Val Leu			
245	250	255	
Asp Gly Val Val Glu Asn Phe Ile Met Leu Arg Glu Ile Arg Asp Ile			
260	265	270	
Pro Gly Thr Leu Asn Gly Leu Tyr Leu Trp Leu Cys Gln Arg Leu Phe			
275	280	285	
Val Arg Lys Gln Phe Ala Lys Val Gln Pro Ile Leu Asn Val Ile Leu			
290	295	300	
Ala Ala Cys Arg Pro Leu Thr Ile Thr Glu Leu Tyr His Ala Val Trp			
305	310	315	320
Thr Lys Asn Met Ser Leu Thr Leu Glu Asp Phe Gln Arg Lys Leu Asp			
325	330	335	
Ile Leu Ser Lys Leu Leu Val Asp Gly Leu Gly Asn Thr Lys Ile Leu			
340	345	350	
Phe His Tyr Ser Phe Ala Glu Trp Leu Leu Asp Val Lys His Cys Thr			
355	360	365	
Gln Lys Tyr Leu Cys Asn Ala Ala Glu Gly His Arg Met Leu Ala Met			
370	375	380	
Ser Tyr Thr Cys Gln Ala Lys Asn Leu Thr Pro Leu Glu Ala Gln Glu			
385	390	395	400
Phe Ala Leu His Leu Ile Asn Ser Asn Leu Gln Leu Glu Thr Ala Glu			
405	410	415	
Leu Ala Leu Trp Met Ile Trp Asn Gly Thr Pro Val Arg Asp Ser Leu			
420	425	430	

Ser Thr Leu Ile Pro Lys Glu Gln Glu Val Leu Gln Leu Leu Val Lys  
435 440 445  
Ala Gly Ala His Val Asn Ser Glu Asp Asp Arg Thr Ser Cys Ile Val  
450 455 460  
Arg Gln Ala Leu Glu Arg Glu Asp Ser Ile Arg Thr Leu Leu Asp Asn  
465 470 475 480  
Gly Ala Ser Val Asn Gln Cys Asp Ser Asn Gly Arg Thr Leu Leu Ala  
485 490 495  
Asn Ala Ala Tyr Ser Gly Ser Leu Asp Val Val Asn Leu Leu Val Ser  
500 505 510  
Arg Gly Ala Asp Leu Glu Ile Glu Asp Ala His Gly His Thr Pro Leu  
515 520 525  
Thr Leu Ala Ala Arg Gln Gly His Thr Lys Val Val Asn Cys Leu Ile  
530 535 540  
Gly Cys Gly Ala Asn Ile Asn His Thr Asp Gln Asp Gly Trp Thr Ala  
545 550 555 560  
Leu Arg Ser Ala Ala Trp Gly Gly His Thr Glu Val Val Ser Ala Leu  
565 570 575  
Leu Tyr Ala Gly Val Lys Val Asp Cys Ala Asp Ala Asp Ser Arg Thr  
580 585 590  
Ala Leu Arg Ala Ala Ala Trp Gly Gly Arg Glu Asp Ile Val Leu Asn  
595 600 605  
Leu Leu Gln His Gly Ala Glu Val Asn Lys Ala Asp Asn Glu Gly Arg  
610 615 620  
Thr Ala Leu Ile Ala Ala Ala Tyr Met Gly His Arg Glu Ile Val Glu  
625 630 635 640  
His Leu Leu Asp His Gly Ala Glu Val Asn His Glu Asp Val Asp Gly  
645 650 655  
Arg Thr Ala Leu Ser Val Ala Ala Leu Cys Val Pro Ala Ser Lys Gly

660	665	670
His Ala Ser Val Val Ser Leu Leu Ile Asp Arg Gly Ala Glu Val Asp		
675	680	685
His Cys Asp Lys Asp Gly Met Thr Pro Leu Leu Val Ala Ala Tyr Glu		
690	695	700
Gly His Val Asp Val Val Asp Leu Leu Leu Glu Gly Gly Ala Asp Val		
705	710	715
720		
Asp His Thr Asp Asn Asn Gly Arg Thr Pro Leu Leu Ala Ala Ala Ser		
725	730	735
Met Gly His Ala Ser Val Val Asn Thr Leu Leu Phe Trp Gly Ala Ala		
740	745	750
Val Asp Ser Ile Asp Ser Glu Gly Arg Thr Val Leu Ser Ile Ala Ser		
755	760	765
Ala Gln Gly Asn Val Glu Val Val Arg Thr Leu Leu Asp Arg Gly Leu		
770	775	780
Asp Glu Asn His Arg Asp Asp Ala Gly Trp Thr Pro Leu His Met Ala		
785	790	795
800		
Ala Phe Glu Gly His Arg Leu Ile Cys Glu Ala Leu Ile Glu Gln Gly		
805	810	815
Ala Arg Thr Asn Glu Ile Asp Asn Asp Gly Arg Ile Pro Phe Ile Leu		
820	825	830
Ala Ser Gln Glu Gly His Tyr Asp Cys Val Gln Ile Leu Leu Glu Asn		
835	840	845
Lys Ser Asn Ile Asp Gln Arg Gly Tyr Asp Gly Arg Asn Ala Leu Arg		
850	855	860
Val Ala Ala Leu Glu Gly His Arg Asp Ile Val Glu Leu Leu Phe Ser		
865	870	875
880		
His Gly Ala Asp Val Asn Cys Lys Asp Ala Asp Gly Arg Pro Thr Leu		
885	890	895

Tyr Ile Leu Ala Leu Glu Asn Gln Leu Thr Met Ala Glu Tyr Phe Leu  
900 905 910  
Glu Asn Gly Ala Asn Val Glu Ala Ser Asp Ala Glu Gly Arg Thr Ala  
915 920 925  
Leu His Val Ser Cys Trp Gln Gly His Met Glu Met Val Gln Val Leu  
930 935 940  
Ile Ala Tyr His Ala Asp Val Asn Ala Ala Asp Asn Glu Lys Arg Ser  
945 950 955 960  
Ala Leu Gln Ser Ala Ala Trp Gln Gly His Val Lys Val Val Gln Leu  
965 970 975  
Leu Ile Glu His Gly Ala Val Val Asp His Thr Cys Asn Gln Gly Ala  
980 985 990  
Thr Ala Leu Cys Ile Ala Ala Gln Glu Gly His Ile Asp Val Val Gln  
995 1000 1005  
Val Leu Leu Glu His Gly Ala Asp Pro Asn His Ala Asp Gln Phe Gly  
1010 1015 1020  
Arg Thr Ala Met Arg Val Ala Ala Lys Asn Gly His Ser Gln Ile Ile  
1025 1030 1035 1040  
Lys Leu Leu Glu Lys Tyr Gly Ala Ser Ser Leu Asn Gly Cys Ser Pro  
1045 1050 1055  
Ser Pro Val His Thr Met Glu Gln Lys Pro Leu Gln Ser Leu Ser Ser  
1060 1065 1070  
Lys Val Gln Ser Leu Thr Ile Lys Ser Asn Ser Ser Gly Ser Thr Gly  
1075 1080 1085  
Gly Gly Asp Met Gln Pro Ser Leu Arg Gly Leu Pro Asn Gly Pro Thr  
1090 1095 1100  
His Ala Phe Ser Ser Pro Ser Glu Ser Pro Asp Ser Thr Val Asp Arg  
1105 1110 1115 1120  
Gln Lys Ser Ser Leu Ser Asn Asn Ser Leu Lys Ser Ser Lys Asn Ser

1125 1130 1135  
Ser Leu Arg Thr Thr Ser Ser Thr Ala Thr Ala Gln Thr Val Pro Ile  
1140 1145 1150  
Asp Ser Phe His Asn Leu Ser Phe Thr Glu Gln Ile Gln Gln His Ser  
1155 1160 1165  
Leu Pro Arg Ser Arg Ser Arg Gln Ser Ile Val Ser Pro Ser Ser Thr  
1170 1175 1180  
Thr Gln Ser Leu Gly Gln Ser His Asn Ser Pro Ser Ser Glu Phe Glu  
1185 1190 1195 1200  
Trp Ser Gln Val Lys Pro Ser Leu Lys Ser Thr Lys Ala Ser Lys Gly  
1205 1210 1215  
Gly Lys Ser Glu Asn Ser Ala Lys Ser Gly Ser Ala Gly Lys Lys Ala  
1220 1225 1230  
Lys Gln Ser Asn Ser Ser Gln Pro Lys Val Leu Glu Tyr Glu Met Thr  
1235 1240 1245  
Gln Phe Asp Arg Arg Gly Pro Ile Ala Lys Ser Gly Thr Ala Ala Pro  
1250 1255 1260  
Pro Lys Gln Met Pro Ala Glu Ser Gln Cys Lys Ile Met Ile Pro Ser  
1265 1270 1275 1280  
Ala Gln Gln Glu Ile Gly Arg Ser Gln Gln Gln Phe Leu Ile His Gln  
1285 1290 1295  
Gln Ser Gly Glu Gln Lys Lys Arg Asn Gly Ile Met Thr Asn Pro Asn  
1300 1305 1310  
Tyr His Leu Gln Ser Asn Gln Val Phe Leu Gly Arg Val Ser Val Pro  
1315 1320 1325  
Arg Thr Met Gln Asp Arg Gly His Gln Glu Val Leu Glu Gly Tyr Pro  
1330 1335 1340  
Ser Ser Glu Thr Glu Leu Ser Leu Lys Gln Ala Leu Lys Leu Gln Ile  
1345 1350 1355 1360

Glu Gly Ser Asp Pro Ser Phe Asn Tyr Lys Lys Glu Thr Pro Leu  
 1365 1370 1375

<210> 2798

<211> 147

<212> PRT

<213> Homo sapiens

<400> 2798

Met Gly Cys Leu Ser Gln Ala Ala Val Gly Leu Thr Phe Leu Phe Cys  
 1 5 10 15  
 Pro Val Trp Cys Ile Ser Asp Thr Ser Gln Leu Thr Cys Cys Ser His  
 20 25 30  
 Trp Asp Pro Ser Ser Ser His Asp Lys Ala Val Gly Leu Ser Pro Met  
 35 40 45  
 Trp Phe Gly Leu Phe Gly Gly Ile Ser Asn Leu Arg Ser Lys Pro Cys  
 50 55 60  
 Pro Leu Leu Pro Leu Cys Asp Leu Thr Leu His Gly Ala Glu Thr Asn  
 65 70 75 80  
 Gln Gly Gly Asn Ala Glu Thr Val Gly Ile Leu Lys Thr Pro Pro Leu  
 85 90 95  
 Lys Arg Trp Gly Phe Pro Lys Gly Val Glu Ala Thr Ser Cys Tyr Leu  
 100 105 110  
 Gly Lys Ser Arg Val Pro Gly Pro Ser Leu Tyr Pro Cys Pro Leu Leu  
 115 120 125  
 Gln Arg His Leu Ser Gln Gly Arg Val Arg Leu Cys Ala Leu Val Ala  
 130 135 140  
 Lys Asp Met

145

&lt;210&gt; 2799

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2799

Met	Gln	Phe	Met	Glu	Glu	Gly	Gly	Cys	Gly	Lys	Val	Gln	Val	Ala	His
1				5					10					15	
Val	Pro	Ser	Thr	Tyr	Cys	Trp	Ile	Leu	Tyr	Ile	Cys	Ala	Lys	Ala	Ala
				20				25					30		
Leu	Arg	Ser	Leu	Gly	Pro	Arg	Ala	Thr	Ser	Trp	Leu	Gly	Ala	Pro	Leu
				35				40					45		
Ser	Gln	Thr	Gly	Leu	Phe	Phe	Ser	Leu	Ala	Leu	His	Ser	Ser	Val	Ser
				50				55					60		
Leu	His	Phe	Ser	Leu	Ser	Pro	Leu	His	His	Cys	Leu	Ser	Leu	Ser	Leu
				65				70					75		80
Ser	Leu	Ser	Leu	Ser	Leu	Ser	Pro	Arg	Arg	Leu	Thr	Arg	Leu	Thr	Phe
				85				90					95		
Leu	Phe	Leu	Leu	Trp	Gly	Ser	Ser	Pro	Thr	Ser	Gly	Cys	Met	Leu	Arg
				100				105					110		
Pro	Pro	Arg	Ser	Gly	Gly	Phe	Ser	Leu	Leu	Thr	Phe	Ser	Thr	Ala	Pro
				115				120					125		
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Pro	His	Pro	Ala	Thr	Thr	Pro	Ile	Cys
				130				135					140		
Val	Phe	Leu	Leu	Thr	Lys	Asp	His	Cys	Lys	Glu	Arg	Arg	Ala	Gly	
				145				150					155		

&lt;210&gt; 2800

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2800

Met Pro Val Phe Ala Ser Met Phe Gly Glu Ser Glu Gln Gln Val Ser

1 5 10 15

Val Thr Val Leu Gly Lys Val Lys Ser Pro Thr Ala Leu Leu Met Trp

20 25 30

Leu Leu Leu Val Pro Ile Ser Phe Pro Val Pro Arg Thr Pro Arg Val

35 40 45

Leu Asp Ser His His Ser Ile Pro Gln Asp Asn Ile Asn Ile Ile Arg

50 55 60

Ser Thr Val Ser Thr Val Leu Leu Leu Leu Lys Val Glu Gly Lys

65 70 75 80

Arg Val Ser Leu His Leu Cys Ile Pro Cys Ser Pro Val Phe Met Asn

85 90 95

Lys Trp Phe Asp Cys Phe Glu Ala Asn Leu Ser Leu

100 105

&lt;210&gt; 2801

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2801

Met	Leu	His	Leu	Pro	Thr	Pro	Pro	Ala	Val	Asn	Leu	Met	Ser	Ser	Met
1				5					10					15	
Thr	Pro	Arg	Ala	Trp	Pro	Pro	Arg	Ala	Ala	Ser	Leu	Gly	Thr	Val	Ser
			20					25					30		
Met	Leu	Pro	Val	Tyr	Trp	Cys	Leu	Cys	Trp	Glu	Thr	Ser	Cys	Ser	Leu
		35					40						45		
Ser	Pro	Leu	Ser	Leu	Cys	Leu	Leu	Cys	Leu	Phe	Ser	Pro	Arg	Leu	Asn
	50					55					60				
Ile	Tyr	Phe	His	Ser	Leu	Pro	Phe	Val	Val	His	Glu	His	Met	Ser	Leu
	65					70					75				80
Glu	Val	Lys	Gly	Val	Ala	Asn	Pro	Pro	Ser	Phe	Ser	Ala	Ser	Glu	Leu
				85					90					95	
Asn	Val	Asn	Gln	Val	Ser	Leu	Lys	Ser	Leu	Leu					
			100						105						

&lt;210&gt; 2802

&lt;211&gt; 365

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2802

Met	Ala	Gly	Pro	Leu	Ser	Ser	Cys	Arg	Leu	Ser	Ala	Arg	Pro	Glu	Gly
1				5					10					15	
Gly	Ser	Gly	Arg	Gly	Arg	Arg	Ala	Glu	Arg	Val	Ser	Pro	Ser	Arg	Ser
			20					25					30		
Asn	Glu	Val	Ile	Ser	Pro	Glu	Ile	Leu	Lys	Met	Arg	Ala	Ala	Leu	Phe
		35						40					45		

Cys Ile Phe Thr Tyr Leu Asp Thr Arg Thr Leu Leu His Ala Ala Glu  
50 55 60  
Val Cys Arg Asp Trp Arg Phe Val Ala Arg His Pro Ala Val Trp Thr  
65 70 75 80  
Arg Val Leu Leu Glu Asn Ala Arg Val Cys Ser Lys Phe Leu Ala Met  
85 90 95  
Leu Ala Gln Trp Cys Thr Gln Ala His Ser Leu Thr Leu Gln Asn Leu  
100 105 110  
Lys Pro Arg Gln Arg Gly Lys Lys Glu Ser Lys Glu Glu Tyr Ala Arg  
115 120 125  
Ser Thr Arg Gly Cys Leu Glu Ala Gly Leu Glu Ser Leu Leu Lys Ala  
130 135 140  
Ala Gly Gly Asn Leu Leu Ile Leu Arg Ile Ser His Cys Pro Asn Ile  
145 150 155 160  
Leu Thr Asp Arg Ser Leu Trp Leu Ala Ser Cys Tyr Cys Arg Ala Leu  
165 170 175  
Gln Ala Val Thr Tyr Arg Ser Ala Thr Asp Pro Val Gly His Glu Val  
180 185 190  
Ile Trp Ala Leu Gly Ala Gly Cys Arg Glu Ile Val Ser Leu Gln Val  
195 200 205  
Ala Pro Leu His Pro Cys Gln Gln Pro Thr Arg Phe Ser Asn Arg Cys  
210 215 220  
Leu Gln Met Ile Gly Arg Cys Trp Pro His Leu Arg Ala Leu Gly Val  
225 230 235 240  
Gly Gly Ala Gly Cys Gly Val Gln Gly Leu Ala Ser Leu Ala Arg Asn  
245 250 255  
Cys Met Arg Leu Gln Val Leu Glu Leu Asp His Val Ser Glu Ile Thr  
260 265 270  
Gln Glu Val Ala Ala Glu Val Cys Arg Glu Gly Leu Lys Gly Leu Glu

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Arg Glu Glu Met Glu Lys Leu Asn Ser Lys Gly Ile Leu Gln Val Leu  
85 90 95  
Pro Asp Glu Ile Thr Phe Pro Leu Ser Pro Leu Arg Lys Tyr Thr Tyr  
100 105 110  
Gln Leu Pro Gly Asn Glu Ser Ser Lys Glu Asn Val Glu Lys Asn Thr  
115 120 125  
Glu Gly Ile Val Thr Pro Val Phe Lys Glu Glu Lys Asp Tyr Ser Glu  
130 135 140  
Gln Glu Ile Gln Glu Ser Ile Ile Lys Thr Asn Val Leu Ser Lys Asp  
145 150 155 160  
Cys Lys Asp Thr Phe Asn Asp Ser Leu Gln Lys Leu Leu Ser Glu Thr  
165 170 175  
Ser Thr Pro Ala Ile Gln Pro Ser Gly Gly Lys Val His Gly Lys Gln  
180 185 190  
Val Leu Glu Pro Ser Val Ser Glu Asn Arg Thr Trp Pro Gln Lys Thr  
195 200 205  
Asp Phe Ala Asp Thr Glu Glu Glu Val Lys Gly Pro Glu Lys Ile Ile  
210 215 220  
Asn Glu His Val Asp Lys Thr Val Val His Pro Lys Val Lys Arg Asn  
225 230 235 240  
Ser Leu Thr Ala Ser Leu Asp Lys Leu Leu Lys Glu Ala Thr Gly Thr  
245 250 255  
Ser Pro Ser Pro Leu Gln Ala Lys Leu Ala Pro Val Ile Thr Gly Thr  
260 265 270  
Asn Ser Lys Leu Glu Glu Gly Arg Phe Phe Gly Lys Gly Ile Glu Gln  
275 280 285  
Ser His Asn Thr Ser Ala Asp Lys Arg Glu Ile Leu Ala Pro Phe Pro  
290 295 300  
Val Arg Asp Glu Thr Phe Gly Asn Thr Ala Leu Leu Lys Lys Ala Glu

305                      310                      315                      320  
Ser Gly Glu Cys Gln Leu Ser Thr Gln Asn Leu Ile Gln Met Ala Ala  
                                 325                      330                      335  
Glu Asp Ser His Pro Leu Asp Pro Thr Ser Gln Leu Ser Arg Lys Gly  
                                 340                      345                      350  
Ser Phe Gly Asp Val Ala Ser Pro Pro Gln Asp Met Leu Phe Pro Gln  
                                 355                      360                      365  
Asp Ala His Leu Val Pro Gln Ala Arg Val His Pro Ser Gln Thr Glu  
                                 370                      375                      380  
Ile Ser Glu Thr Val Glu Lys Val Ile Leu Pro Pro Arg Pro Val Leu  
385                      390                      395                      400  
Asn Asp Val Ser Ala Ala Leu Gln Lys Leu Cys Gly Glu Val Trp Leu  
                                 405                      410                      415  
Ser Tyr Pro Ala Gly Arg Glu Val Gly Pro Gly Glu Val Asn Pro Glu  
                                 420                      425                      430  
Phe Pro Glu Ala Val Gln Pro Val Cys Ser Pro Leu Asn Pro Pro Gly  
                                 435                      440                      445  
Val Ile Ser Pro Trp Ala Thr Met Asp Thr Ile Val Pro Asp Arg Lys  
                                 450                      455                      460  
Asp Phe Tyr Ser Ser Asn Val Val Pro Asp Lys Thr His Glu Val Gly  
465                      470                      475                      480  
Ser Tyr Leu Ala Ala Gln Met Ser Pro Ser Asp Gln Thr Leu Ser Ser  
                                 485                      490                      495  
Phe Ala Ser Ile Val Ala Gln Tyr Gly Lys Gly Leu Pro Gln Glu Val  
                                 500                      505                      510  
Glu Glu Ile Val Arg Glu Thr Ile Val Gln Pro Lys Ser Glu Phe Leu  
                                 515                      520                      525  
Glu Phe Ser Ala Gly Leu Glu Lys Leu Leu Lys Glu Glu Thr Glu Thr  
                                 530                      535                      540

Phe Pro Ser Lys Tyr Glu Ser Asp Thr Gly Asn Leu Ser Pro Ser Lys  
545 550 555 560  
Leu Ile Gly Ser Thr Glu Glu Pro Arg Arg Ala Thr Ser Glu Cys His  
565 570 575  
Pro Glu Glu Leu Lys Glu Thr Val Glu Lys Ala Glu Ala Pro Leu Ile  
580 585 590  
Thr Glu Ser Ala Phe Asp Ala Gly Phe Glu Lys Leu Leu Lys Glu Ile  
595 600 605  
Thr Glu Ala Pro Pro Tyr Gln Pro Gln Val Ser Val Arg Glu Glu Thr  
610 615 620  
His Glu Lys Glu Ser Ser Gln Ser Glu Gln Thr Arg Phe Leu Gly Thr  
625 630 635 640  
Val Pro His Phe Tyr Arg Ala Ala Ser Gln Thr Ser Glu Met Arg Asp  
645 650 655  
Lys Ser Asn Gly Leu Glu Ser Gln Val Asn Gln Cys Asp Lys Met Leu  
660 665 670  
Val Gly Asp Ala Leu Val Thr Asp Leu Leu Val Asp Phe Cys Gly Ser  
675 680 685  
Arg Ser Gly Val Glu Ile Pro Arg Thr Pro Gln Leu Tyr Val Ala His  
690 695 700  
Glu Ile Gly Thr Ile Lys Thr Val Thr Pro Pro Glu Asp Arg Asp Ser  
705 710 715 720  
Glu Ser Gly Val Ala Gly Gly Gln Gly Thr Leu Gln Glu Pro Gly Phe  
725 730 735  
Gly Glu Ala Ser Glu Ala Ile Ser Val Ser Arg Asn Arg Gln Pro Ile  
740 745 750  
Pro Leu Leu Met Asn Lys Glu Asn Ser Thr Lys Thr Ser Lys Val Glu  
755 760 765  
Leu Thr Leu Ala Ser Pro Tyr Met Lys Gln Glu Lys Glu Glu Glu Lys

770	775	780	
Glu Gly Phe Ser Glu Ser Asp Phe Ser Asp Gly Asn Thr Ser Ser Asn			
785	790	795	800
Ala Glu Ser Trp Arg Asn Pro Ser Ser Ser Glu Glu Glu Pro Ser Pro			
	805	810	815
Val Leu Lys Thr Leu Glu Arg Ser Ala Ala Arg Lys Met Pro Ser Lys			
	820	825	830
Ser Leu Glu Asp Ile Ser Ser Asp Ser Ser Asn Gln Ala Lys Val Asp			
	835	840	845
Asn Gln Pro Glu Glu Leu Val Arg Ser Ala Glu Asp Asp Phe			
	850	855	860

&lt;210&gt; 2804

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2804

Met Ile Leu Pro Ala Ala Leu Cys Arg Lys Gly Pro Gly Ser Leu Pro			
1	5	10	15
Ala Ser Gly Gly Leu Leu Ala Ser Gln Gly Pro Leu Leu Gly Leu Leu			
	20	25	30
Ser Ser Leu Tyr Ser Val Ser Cys Gln Arg Val Cys His Ala Leu Val			
	35	40	45
Ser Cys Ala Tyr Met Met Gln Leu Asp Val Val Leu Gly Leu Gln Trp			
	50	55	60
Glu Pro Pro Lys Met His Cys Asn Cys Ser Ile Cys Leu Pro Gly Lys			
	65	70	75
			80

Lys Cys Thr Val Thr Arg Ser Ser Gly Gln Ala Leu Gly Gln Ala Leu  
                             85                            90                            95  
 Gly Pro Ser Leu Gln Val His Trp Val Leu Ala Trp His Val Trp Ala  
                             100                            105                            110  
 Pro Pro Gly Trp Arg Gly Gly Gly Arg Val Ala Pro Trp Pro Arg Ser  
                             115                            120                            125  
 Gln Pro Pro Ser Ser Leu Tyr Ser His Ser Leu Asp Thr Gln His Arg  
                             130                            135                            140  
 Arg Leu Gly Cys Leu Cys Arg Cys Tyr Pro Glu Pro Leu Ser Tyr Cys  
                             145                            150                            155                            160  
 Leu Val Phe Leu

<210> 2805

<211> 151

<212> PRT

<213> Homo sapiens

<400> 2805

Met Val Asn Lys Glu Glu Trp Leu Ser Glu Asn Ser Phe Ser Cys Phe  
                             1                            5                            10                            15  
 Pro Val Ser Leu Gln Lys Pro Gly Met Asp Val Ala Asp Ala Tyr Val  
                             20                            25                            30  
 Thr Phe Val Arg His Ser Gln Asp Val Leu Arg Asp Lys Val Asn Glu  
                             35                            40                            45  
 Glu Met Tyr Ile Glu Arg Leu Phe Asp Gln Trp Tyr Asn Ser Ser Met  
                             50                            55                            60  
 Asn Val Ile Cys Thr Trp Leu Thr Asp Arg Met Asp Leu Gln Leu His



65                      70                      75                      80  
 Ile Tyr Gln Leu Lys Thr Leu Ile Arg Met Val Lys Lys Thr Tyr Arg  
                          85                      90                      95  
 Asp Phe Arg Leu Gln Gly Val Leu Asp Ser Thr Leu Asn Ser Lys Thr  
                          100                      105                      110  
 Tyr Glu Thr Ile Arg Asn Arg Leu Thr Val Glu Glu Ala Thr Ala Ser  
                          115                      120                      125  
 Val Ser Glu Gly Gly Gly Leu Gln Gly Ile Ser Met Lys Asp Ser Asp  
                          130                      135                      140  
 Glu Glu Asp Glu Glu Asp Asp  
 145                      150

<210> 2806

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2806

Met Leu Pro Met Leu Glu Cys Ser Gly Val Ile Pro Ala Tyr His Asn  
     1                      5                      10                      15  
 Leu Lys Leu Leu Gly Pro Ser Asp Ser Pro Ala Ser Ala Ser Arg Val  
                          20                      25                      30  
 Ala Gly Thr Ala Gly Val Arg His His Thr Trp Leu Ile Phe Val Cys  
                          35                      40                      45  
 Phe Phe Val Glu Met Glu Cys Arg Tyr Val Ala Gln Ala Gly Leu Lys  
                          50                      55                      60  
 Leu Leu Gly Ser Ser Asp Pro Pro Ile Leu Gly Ser Gln Ser Ala Trp  
     65                      70                      75                      80

Ile Ile Asp Met Ser Asn Cys Ile Gly Pro Phe Ser Ser Tyr Leu Thr  
85 90 95  
Ser Val Ser Leu Pro His Ser Ser Ile His Pro Ser Ile His Pro Ser  
100 105 110  
Ile His Pro Ser Phe Ile Gln Thr Pro Ser Gly Leu Ser Gln Pro Pro  
115 120 125  
Gln Phe  
130

&lt;210&gt; 2807

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2807

Met Asn Ser Ala Ile Ser Val Thr Met Arg Ser Phe Lys Arg Arg Phe  
1 5 10 15  
Phe His Leu Ile Gln Leu Gly Asp Gly Ser Tyr Asn Leu Asn Phe Tyr  
20 25 30  
Lys Asp Glu Lys Ile Ser Lys Glu Pro Lys Gly Ser Ile Phe Leu Asp  
35 40 45  
Ser Cys Met Gly Val Val Gln Asn Asn Lys Val Arg Arg Phe Ala Phe  
50 55 60  
Glu Leu Lys Met Gln Asp Lys Ser Ser Tyr Leu Leu Ala Ala Asp Ser  
65 70 75 80  
Glu Val Glu Met Glu Glu Trp Ile Thr Ile Leu Asn Lys Ile Leu Gln  
85 90 95  
Leu Asn Phe Glu Ala Ala Met Gln Glu Lys Arg Asn Gly Asp Ser His

100 105 110  
Glu Asp Asp Glu Gln Ser Lys Leu Glu Gly Ser Gly Ser Gly Leu Asp  
115 120 125  
Ser Tyr Leu Pro Glu Leu Ala Lys Ser Ala Arg Glu Ala Glu Ile Lys  
130 135 140  
Leu Lys Ser Glu Ser Arg Val Lys Leu Phe Tyr Leu Asp Pro Asp Ala  
145 150 155 160  
Gln Lys Leu Asp Phe Ser Ser Ala Glu Pro Glu Val Lys Ser Phe Glu  
165 170 175  
Glu Lys Phe Gly Lys Arg Ile Leu Val Lys Cys Asn Asp Leu Ser Phe  
180 185 190  
Asn Leu Gln Cys Cys Val Ala Glu Asn Glu Glu Gly Pro Thr Thr Asn  
195 200 205  
Val Glu Pro Phe Phe Val Thr Leu Ser Leu Phe Asp Ile Lys Tyr Asn  
210 215 220  
Arg Lys Ile Ser Ala Asp Phe His Val Asp Leu Asn His Phe Ser Val  
225 230 235 240  
Arg Gln Met Leu Ala Thr Thr Ser Pro Ala Leu Met Asn Gly Ser Gly  
245 250 255  
Gln Ser Pro Ser Val Leu Lys Gly Ile Leu His Glu Ala Ala Met Gln  
260 265 270  
Tyr Pro Lys Gln Gly Ile Phe Ser Val Thr Cys Pro His Pro Asp Ile  
275 280 285  
Phe Leu Val Ala Arg Ile Glu Lys Val Leu Gln Gly Ser Ile Thr His  
290 295 300  
Cys Ala Glu Pro Tyr Met Lys Ser Ser Asp Ser Ser Lys Val Ala Gln  
305 310 315 320  
Lys Val Leu Lys Asn Ala Lys Gln Ala Cys Gln Arg Leu Gly Gln Tyr  
325 330 335

Arg Met Pro Phe Ala Trp Ala Ala Arg Thr Leu Phe Lys Asp Ala Ser

340

345

350

Gly Asn Leu Asp Lys Asn Ala Arg Phe Ser Ala Ile Tyr Arg Gln Asp

355

360

365

Ser Asn Lys Leu Ser Asn Asp Asp Met Leu Lys Leu Leu Ala Asp Phe

370

375

380

Arg Lys Pro Glu Lys Met Ala Lys Leu Pro Val Ile Leu Gly Asn Leu

385

390

395

400

Asp Ile Thr Ile Asp Asn Val Ser Ser Asp Phe Pro Asn Tyr Val Asn

405

410

415

Ser Ser Tyr Ile Pro Thr Lys Gln Phe Glu Thr Cys Ser Lys Thr Pro

420

425

430

Ile Thr Phe Glu Val Glu Glu Phe Val Pro Cys Ile Pro Lys His Thr

435

440

445

Gln Pro Tyr Thr Ile Tyr Thr Asn His Leu Tyr Val Tyr Pro Lys His

450

455

460

Leu Lys Tyr Asp Ser Gln Lys Ser Phe Ala Lys Ala Arg Asn Ile Ala

465

470

475

480

Ile Cys Ile Glu Phe Lys Asp Ser Asp Glu Glu Asp Ser Gln Pro Leu

485

490

495

Lys Cys Ile Tyr Gly Arg Pro Gly Gly Pro Val Phe Thr Arg Ser Ala

500

505

510

Phe Ala Ala Val Tyr Thr Ile Thr Lys Thr Gln Asn Phe Met Met Arg

515

520

525

Leu Lys

530

&lt;210&gt; 2808

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2808

Met Met Asp Pro Cys Ser Val Gly Val Gln Leu Arg Thr Thr Asn Glu

1 5 10 15

Cys His Lys Thr Tyr Tyr Thr Arg His Thr Gly Phe Lys Thr Leu Gln

20 25 30

Glu Leu Ser Ser Asn Asp Met Leu Leu Leu Gln Leu Arg Thr Gly Met

35 40 45

Thr Leu Ser Gly Asn Asn Thr Ile Cys Phe His His Val Lys Ile Tyr

50 55 60

Ile Asp Arg Phe Glu Asp Leu Gln Lys Ser Cys Cys Asp Pro Phe Asn

65 70 75 80

Ile His Lys Lys Leu Ala Lys Lys Asn Leu His Val Ile Asp Leu Asp

85 90 95

Asp Ala Thr Phe Leu Ser Ala Lys Phe Gly Arg Gln Leu Val Pro Gly

100 105 110

Trp Lys Leu Cys Pro Lys Cys Thr Gln Ile Ile Asn Gly Ser Val Asp

115 120 125

Val Asp Thr Glu Asp Arg Gln Lys Arg Lys Pro Glu Ser Asp Gly Arg

130 135 140

Thr Ala Lys Ala Leu Arg Ser Leu Gln Phe Thr Asn Pro Gly Arg Gln

145 150 155 160

Thr Glu Phe Ala Pro Glu Thr Gly

165

&lt;210&gt; 2809

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2809

Met Leu Asp Leu Asn Ser Ala Ile Gln Ala Ala Lys Ser Gly Gly Asp

1 5 10 15

Thr Ala Pro Ala Leu Pro Gly Arg Thr Val Cys Thr Arg Pro Pro Arg

20 25 30

Ser Pro Asn Glu Val Ser Leu Glu Gln Glu Ser Glu Asp Asp Ala Arg

35 40 45

Gly Val Arg Ser Ser Leu Glu Gly His Gly Gln His Arg Ala Asn Thr

50 55 60

Thr Met His Val Cys Trp Tyr Arg Asn Thr Ser Val Ser Arg Ala Asp

65 70 75 80

His Ser Ala Ala Val Glu Asn Gln Leu Ser Gly Tyr Leu Leu Arg Lys

85 90 95

Phe Lys Asn Ser His Gly Trp Gln Lys Leu Trp Val Val Phe Thr Asn

100 105 110

Phe Cys Leu Phe Phe Tyr Lys Thr His Gln Asp Asp Tyr Pro Leu Ala

115 120 125

Ser Leu Pro Leu Leu Gly Tyr Ser Val Ser Ile Pro Arg Glu Ala Asp

130 135 140

Gly Ile His Lys Asp Tyr Val Phe Lys Leu Gln Phe Lys Ser His Val

145 150 155 160

Tyr Phe Phe Arg Ala Glu Ser Lys Tyr Thr Phe Glu Arg Trp Met Glu

165 170 175

Val Ile Gln Gly Ala Ser Ser Ser Ala Gly Arg Ala Pro Ser Ile Val

180 185 190  
Gln Asp Gly Pro Gln Pro Ser Ser Gly Leu Glu Gly Met Val Arg Gly  
195 200 205  
Lys Glu Glu  
210

<210> 2810

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2810

Met Glu Gln Asn Pro Leu Arg Ser Glu Pro Ala Leu Val Pro Pro Lys  
1 5 10 15  
Asp Glu Glu Ala Ala Val Ser Thr Glu Glu Pro Arg Ile Asn Leu Pro  
20 25 30  
His Leu Leu Glu Glu Glu Val Glu Phe Ser Thr Asp Leu Ile Asp Ser  
35 40 45  
Tyr Pro Gly His Glu Thr Leu Trp Cys His Arg Arg His Ile Phe Tyr  
50 55 60  
Leu Gln His His Leu Asn Gly Arg Phe Pro His Ser Met Thr Gln Leu  
65 70 75 80  
Ser Pro Ala Asp Ser Pro Gly Gly Thr Leu Ser Asp Leu His Leu Ile  
85 90 95  
Pro Ala Gly Ser Gln Leu Ser Gln Ala Met Glu Val Asp Gly Leu Asn  
100 105 110  
Asp Ser Ser Lys Gln Gly Tyr Ser Gln Glu Thr Lys Arg Leu Lys Arg  
115 120 125

Thr Pro Val Pro Asp Ser Leu Gly Leu Glu Met Glu His Arg Phe Ile  
 130 135 140  
 Asp Gln Val Leu Ser Thr Cys Arg Asn Val Glu Gln Ala Arg Phe Ala  
 145 150 155 160  
 Ser Ala Tyr Arg Lys Trp Leu Val Thr Leu Ser Gln  
 165 170

<210> 2811

<211> 931

<212> PRT

<213> Homo sapiens

<400> 2811

Met Asp Thr Lys Glu Glu Lys Lys Glu Arg Lys Gln Ser Tyr Phe Ala  
 1 5 10 15  
 Arg Leu Lys Glu Lys Lys Gln Ala Lys Gln Asn Ala Glu Thr Ala Ser  
 20 25 30  
 Ala Val Ala Thr Arg Thr His Thr Gly Lys Glu Asp Asn Asn Thr Val  
 35 40 45  
 Val Leu Glu Pro Asp Lys Cys Asn Ile Ala Val Glu Glu Glu Tyr Met  
 50 55 60  
 Thr Asp Glu Lys Lys Lys Arg Lys Ser Asn Gln Leu Lys Glu Ile Arg  
 65 70 75 80  
 Arg Thr Glu Leu Lys Arg Tyr Tyr Ser Ile Asp Asp Asn Gln Asn Lys  
 85 90 95  
 Thr His Asp Lys Lys Glu Lys Lys Met Val Val Gln Lys Pro His Gly  
 100 105 110  
 Thr Met Glu Tyr Thr Ala Gly Asn Gln Asp Thr Leu Asn Ser Ile Ala



115 120 125  
Leu Lys Phe Asn Ile Thr Pro Asn Lys Leu Val Glu Leu Asn Lys Leu  
130 135 140  
Phe Thr His Thr Ile Val Pro Gly Gln Val Leu Phe Val Pro Asp Ala  
145 150 155 160  
Asn Ser Pro Ser Ser Thr Leu Arg Leu Ser Ser Ser Ser Pro Gly Ala  
165 170 175  
Thr Val Ser Pro Ser Ser Ser Asp Ala Glu Tyr Asp Lys Leu Pro Asp  
180 185 190  
Ala Asp Leu Ala Arg Lys Ala Leu Lys Pro Ile Glu Arg Val Leu Ser  
195 200 205  
Ser Thr Ser Glu Glu Asp Glu Pro Gly Val Val Lys Phe Leu Lys Met  
210 215 220  
Asn Cys Arg Tyr Phe Thr Asp Gly Lys Gly Val Val Gly Gly Val Met  
225 230 235 240  
Ile Val Thr Pro Asn Asn Ile Met Phe Asp Pro His Lys Ser Asp Pro  
245 250 255  
Leu Val Ile Glu Asn Gly Cys Glu Glu Tyr Gly Leu Ile Cys Pro Met  
260 265 270  
Glu Glu Val Val Ser Ile Ala Leu Tyr Asn Asp Ile Ser His Met Lys  
275 280 285  
Ile Lys Asp Ala Leu Pro Ser Pro Gly Glu Trp Glu Asp Leu Ala Ser  
290 295 300  
Glu Lys Asp Ile Asn Pro Phe Ser Lys Phe Lys Ser Ile Asn Lys Glu  
305 310 315 320  
Lys Arg Gln Gln Asn Gly Glu Lys Ile Met Thr Ser Asp Ser Arg Pro  
325 330 335  
Ile Val Pro Leu Glu Lys Ser Thr Gly His Thr Pro Thr Lys Pro Ser  
340 345 350

Gly Ser Ser Val Ser Glu Lys Leu Lys Lys Leu Asp Ser Ser Arg Glu  
355 360 365  
Thr Ser His Gly Ser Pro Thr Val Thr Lys Leu Ser Lys Glu Pro Ser  
370 375 380  
Asp Thr Ser Ser Ala Phe Glu Ser Thr Ala Lys Glu Asn Phe Leu Gly  
385 390 395 400  
Glu Asp Asp Asp Phe Val Asp Leu Glu Glu Leu Ser Ser Gln Thr Gly  
405 410 415  
Gly Gly Met His Lys Lys Asp Thr Leu Lys Glu Cys Leu Ser Leu Asp  
420 425 430  
Pro Glu Glu Arg Lys Lys Ala Glu Ser Gln Ile Asn Asn Ser Ala Val  
435 440 445  
Glu Met Gln Val Gln Ser Ala Leu Ala Phe Leu Gly Thr Glu Asn Asp  
450 455 460  
Val Glu Leu Lys Gly Ala Leu Asp Leu Glu Thr Cys Glu Lys Gln Asp  
465 470 475 480  
Ile Met Pro Glu Val Asp Lys Gln Ser Gly Ser Pro Glu Ser Arg Val  
485 490 495  
Glu Asn Thr Leu Asn Ile His Glu Asp Leu Asp Lys Val Lys Leu Ile  
500 505 510  
Glu Tyr Tyr Leu Thr Lys Asn Lys Glu Gly Pro Gln Val Ser Glu Asn  
515 520 525  
Leu Gln Lys Thr Glu Leu Ser Asp Gly Lys Ser Ile Glu Pro Gly Gly  
530 535 540  
Ile Asp Ile Thr Leu Ser Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile  
545 550 555 560  
Thr Glu Gly Asn Lys Glu Pro Asp Lys Thr Trp Val Lys Lys Gly Glu  
565 570 575  
Pro Leu Pro Val Lys Leu Asn Ser Ser Thr Glu Ala Asn Val Ile Lys

580 585 590  
Glu Ala Leu Asp Ser Ser Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln  
595 600 605  
Gly Ala Gln Met Asp Asn Lys Ser Glu Val Gln Leu Trp Leu Leu Lys  
610 615 620  
Arg Ile Gln Val Pro Ile Glu Asp Ile Leu Pro Ser Lys Glu Glu Lys  
625 630 635 640  
Ser Lys Thr Pro Pro Met Phe Leu Cys Ile Lys Val Gly Lys Pro Met  
645 650 655  
Arg Lys Ser Phe Ala Thr His Thr Ala Ala Met Val Gln Gln Tyr Gly  
660 665 670  
Lys Arg Arg Lys Gln Pro Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg  
675 680 685  
Val Asp His Leu Tyr Thr Phe Phe Val Gln Trp Ser Pro Asp Val Tyr  
690 695 700  
Gly Lys Asp Ala Lys Glu Gln Gly Phe Val Val Val Glu Lys Glu Glu  
705 710 715 720  
Leu Asn Met Ile Asp Asn Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp  
725 730 735  
Glu Ile Ile Thr Val Glu Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser  
740 745 750  
Tyr Tyr Glu Asp Glu Asp Glu Glu Val Leu Pro Val Leu Arg Pro His  
755 760 765  
Ser Ala Leu Leu Glu Asn Met His Ile Glu Gln Leu Ala Arg Arg Leu  
770 775 780  
Pro Ala Arg Val Gln Gly Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu  
785 790 795 800  
Glu His Gly Thr Ser Leu Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu  
805 810 815

Asp Ser Pro Val Leu Leu Val Ile Lys Asp Met Asp Asn Gln Ile Phe

820

825

830

Gly Ala Tyr Ala Thr His Pro Phe Lys Phe Ser Asp His Tyr Tyr Gly

835

840

845

Thr Gly Glu Thr Phe Leu Tyr Thr Phe Ser Pro His Phe Lys Val Phe

850

855

860

Lys Trp Ser Gly Glu Asn Ser Tyr Phe Ile Asn Gly Asp Ile Ser Ser

865

870

875

880

Leu Glu Leu Gly Gly Gly Gly Gly Arg Phe Gly Leu Trp Leu Asp Ala

885

890

895

Asp Leu Tyr His Gly Arg Ser Asn Ser Cys Ser Thr Phe Asn Asn Asp

900

905

910

Ile Leu Ser Lys Lys Glu Asp Phe Ile Val Gln Asp Leu Glu Val Trp

915

920

925

Ala Phe Asp

930

<210> 2812

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2812

Met Thr Asn Leu Ser Lys Met Ala Thr Pro Ala Thr Leu Tyr Ser Ser

1

5

10

15

Ala Leu Phe Phe Phe Ile Ala Val Val Thr Thr Gln His Tyr Val Phe

20

25

30

Ile Tyr Val Phe Leu Ser Tyr Leu Ser Pro Met Leu Glu Cys Lys Leu

35                                      40                                      45  
 Pro Ser Gly Lys Gly Pro Ile Val Leu Tyr Leu Leu Ser Pro Val Thr  
 50                                      55                                      60  
 Lys Ser Val Ser Gly Ala Gln Ile Phe Val Gln Gln Gln Ser Asn Phe  
 65                                      70                                      75                                      80  
 Ser Ile Cys Ser Ile Leu Cys Phe Cys Leu Glu Ala Pro Ile Ser Leu  
 85                                      90                                      95  
 Met Tyr Ser Leu Ser Ala Ser Leu Glu Asp Gln Pro Trp Ala Trp Ala  
 100                                      105                                      110  
 Leu Cys Gly Gly Gly Arg Ala Pro Ser Thr Thr  
 115                                      120

&lt;210&gt; 2813

&lt;211&gt; 760

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2813

Met Leu Phe Leu Glu Ala Glu Gln Gly Val Thr His Ile Thr Glu Asp  
 1                                      5                                      10                                      15  
 Ile Cys Leu Asp Ile Ile Arg Arg Tyr Glu Leu Ser Glu Glu Gly Arg  
 20                                      25                                      30  
 Gln Lys Gly Phe Leu Ala Ile Asp Gly Phe Thr Gln Tyr Leu Leu Ser  
 35                                      40                                      45  
 Ser Glu Cys Asp Ile Phe Asp Pro Glu Gln Lys Lys Val Ala Gln Asp  
 50                                      55                                      60  
 Met Thr Gln Pro Leu Ser His Tyr Tyr Ile Asn Ala Ser His Asn Thr  
 65                                      70                                      75                                      80

Tyr Leu Ile Glu Asp Gln Phe Arg Gly Pro Ala Asp Ile Asn Gly Tyr  
                             85                            90                            95  
 Ile Arg Ala Leu Lys Met Gly Cys Arg Ser Val Glu Leu Asp Val Ser  
                             100                            105                            110  
 Asp Gly Ser Asp Asn Glu Pro Ile Leu Cys Asn Arg Asn Asn Met Thr  
                             115                            120                            125  
 Thr His Val Ser Phe Arg Ser Val Ile Glu Val Ile Asn Lys Phe Ala  
                             130                            135                            140  
 Phe Val Ala Ser Glu Tyr Pro Leu Ile Leu Cys Leu Gly Asn His Cys  
 145                            150                            155                            160  
 Ser Leu Pro Gln Gln Lys Val Met Ala Gln Gln Met Lys Lys Val Phe  
                             165                            170                            175  
 Gly Asn Lys Leu Tyr Thr Glu Ala Pro Leu Pro Ser Glu Ser Tyr Leu  
                             180                            185                            190  
 Pro Ser Pro Glu Lys Leu Lys Arg Met Ile Ile Val Lys Gly Lys Lys  
                             195                            200                            205  
 Leu Pro Ser Asp Pro Asp Val Leu Glu Gly Glu Val Thr Asp Glu Asp  
                             210                            215                            220  
 Glu Glu Ala Glu Met Ser Arg Arg Met Ser Val Asp Tyr Asn Gly Glu  
 225                            230                            235                            240  
 Gln Lys Gln Ile Arg Leu Cys Arg Glu Leu Ser Asp Leu Val Ser Ile  
                             245                            250                            255  
 Cys Lys Ser Val Gln Tyr Arg Asp Phe Glu Leu Ser Met Lys Ser Gln  
                             260                            265                            270  
 Asn Tyr Trp Glu Met Cys Ser Phe Ser Glu Thr Glu Ala Ser Arg Ile  
                             275                            280                            285  
 Ala Asn Glu Tyr Pro Glu Asp Phe Val Asn Tyr Asn Lys Lys Phe Leu  
                             290                            295                            300  
 Ser Arg Ile Tyr Pro Ser Ala Met Arg Ile Asp Ser Ser Asn Leu Asn

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Leu Lys Thr Ile Asp Asp Ile Phe Lys Ile Ala Val His Pro Leu Arg  
545 550 555 560  
Glu Ala Ile Asp Met Arg Glu Asn Met Gln Asn Ala Ile Val Ser Ile  
565 570 575  
Lys Glu Leu Cys Gly Leu Pro Pro Ile Ala Ser Leu Lys Gln Cys Leu  
580 585 590  
Leu Thr Leu Ser Ser Arg Leu Ile Thr Ser Asp Asn Thr Pro Ser Val  
595 600 605  
Ser Leu Val Met Arg Asp Ser Phe Pro Tyr Leu Glu Pro Leu Gly Ala  
610 615 620  
Ile Pro Asp Val Gln Lys Lys Met Leu Thr Ala Tyr Asp Leu Met Ile  
625 630 635 640  
Gln Glu Ser Arg Phe Leu Ile Glu Met Ala Asp Thr Val Gln Glu Lys  
645 650 655  
Ile Val Gln Cys Gln Lys Ala Gly Met Glu Phe His Glu Glu Leu His  
660 665 670  
Asn Leu Gly Ala Lys Glu Gly Leu Lys Gly Arg Lys Leu Asn Lys Ala  
675 680 685  
Thr Glu Ser Phe Ala Trp Asn Ile Thr Val Leu Lys Gly Gln Gly Asp  
690 695 700  
Leu Leu Lys Asn Ala Lys Asn Glu Ala Ile Glu Asn Met Lys Gln Ile  
705 710 715 720  
Gln Leu Ala Cys Leu Ser Cys Gly Leu Ser Lys Ala Pro Ser Ser Ser  
725 730 735  
Ala Glu Ala Lys Ser Lys Arg Ser Leu Glu Ala Ile Glu Glu Lys Glu  
740 745 750  
Ser Ser Glu Glu Asn Gly Lys Leu  
755 760



&lt;210&gt; 2814

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2814

Met Asn Leu Arg Pro Leu Cys Cys His Pro Ala Lys Cys Gly Thr Ser

1 5 10 15

Pro Ser Gly Leu Glu Ile Leu Tyr Pro Ser Leu Gly Leu Ala Asp Phe

20 25 30

Leu Leu Gln Pro Leu Cys Leu Cys Thr His Ile His Thr Cys Thr His

35 40 45

Ala His Ala His Pro Val Gln Phe Leu Ser Ala Pro Cys Thr Pro Gln

50 55 60

Asn Ser Met Gly Ser Ser Phe Leu Leu Arg Asp Ile Val Leu Gly Pro

65 70 75 80

Ile Ser Ala Cys Arg Gly Leu Asn Val Ser Gln Asp Cys Leu Leu Ile

85 90 95

Leu Arg Ser Gly Phe Lys Thr Lys Pro Lys Leu Lys Leu Lys Cys Phe

100 105 110

Leu Gln Arg Ile Ile His Gln His Lys Val Arg Val Ser

115 120 125

&lt;210&gt; 2815

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2815

Met Glu Phe Leu Lys Ala Pro Gln Val Val Leu Leu Tyr Asn Gln Asn  
 1 5 10 15  
 Trp Asn His Tyr Pro Arg Thr Pro Val Leu Ser Val Trp Ser Leu Asp  
 20 25 30  
 Gln Gln His Leu Tyr His Val Asp Leu Ile Arg Asn Ser Asn Ser Gln  
 35 40 45  
 Ala Pro Asn Leu Leu Asp Gln Gln Leu Trp Gly Lys Ala Ala Ala Ile  
 50 55 60  
 Ser Leu Thr Arg Pro Pro Asp Lys Ser Asp Ala Cys Ser Ser Leu Arg  
 65 70 75 80  
 Ala Thr Val Leu Gly Gln Gln Ile Thr Leu Ser Thr Thr Val Ile Ser  
 85 90 95  
 Ser Val Val Leu Ser Asp Glu Trp  
 100

&lt;210&gt; 2816

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2816

Met Gly Lys Ser Gly His Thr Gln Gly Ile Arg Lys Ala Ala Glu Ser  
 1 5 10 15  
 Ile Ala Asp Asn Pro Met Asn Thr Thr Pro Gly Met Gly Leu Arg Gly  
 20 25 30  
 Asn Pro Thr Ala Gly His Ala Asp Pro Arg Thr Gly Arg Arg Arg Asp

35                      40                      45  
 Gly Gly Thr Arg Arg Pro Ser Ala Arg Gln Pro Pro Thr Ala Pro Arg  
 50                      55                      60  
 Gly Gly Pro Gln Arg Ser Gly Gly Arg Ala Pro Ala Ala Pro Thr Thr  
 65                      70                      75                      80  
 Leu Trp Arg Gly Gly Arg Ser Thr Arg Arg Asp Glu Thr Ser Leu Arg  
 85                      90                      95  
 Ser Gly Gly Glu Ser Gly His Pro Pro Ala Gly Glu Thr Ala Pro Pro  
 100                      105                      110  
 Ala Gly Gly Asp Gly Leu Trp Arg Asp Ser Trp Ser Arg Gly Gly Pro  
 115                      120                      125  
 Pro Ser Ala Gly Glu Gly Ala Arg Pro Ser Ala Gly Pro Ser Pro Pro  
 130                      135                      140  
 Thr Gly Gly Ala His Ala Pro Pro Ser Ala Gly Glu Ser Gly Pro Trp  
 145                      150                      155                      160  
 Thr Lys Gly Thr Glu Arg Thr Glu Pro Ala Thr Glu Lys Gly Lys Arg  
 165                      170                      175  
 Arg Ile

&lt;210&gt; 2817

&lt;211&gt; 1062

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2817

Met Gly Asn Ser Leu Gly Cys Phe Lys Glu Pro Lys Glu Ser Ile Ala  
 1                      5                      10                      15

Ile Pro Glu Lys Ala Pro Ile Ser Pro Lys Lys Arg Val Arg Phe Lys  
 20 25 30  
 Arg Arg Trp Arg Gly Lys Lys Ile Pro Thr Pro Glu Ala Ser His Gln  
 35 40 45  
 Glu Glu Thr Ser Glu Gly Thr Gly Val Ile Glu Glu Thr Glu Thr Leu  
 50 55 60  
 Thr Lys Leu Thr Glu Ser Leu Gln Lys Glu Asp Gly Val Gly Gly Val  
 65 70 75 80  
 Glu His Thr Pro Pro Asp Ile Leu Leu Pro Gly Asp Ser Ala Pro Asn  
 85 90 95  
 Ser Arg Val Val Asp Arg Gly Met Ile Val Gln Val Lys Glu Arg Phe  
 100 105 110  
 Gln Gly Glu Val Gln Thr Ala His Leu Leu Leu Glu Asn Glu Ser Ser  
 115 120 125  
 Val Ala Gly Gly Val Trp Asp Ser Leu Glu Glu Gly Met Thr Val Ile  
 130 135 140  
 Ala His Leu Leu Asp Asn Pro Ala Glu Arg Asn Cys Glu Lys Ser Val  
 145 150 155 160  
 Ser Gln Leu Val Glu Phe Pro Arg Thr Ala Ser Cys Ser Ser Arg Ala  
 165 170 175  
 Val Leu Leu Pro Leu Gln Gly Glu Thr Ala Val Glu Lys Gly Asn Ile  
 180 185 190  
 Gln Arg Gly Phe Arg Ser Cys Ala Leu Pro Arg Thr Asp Tyr Pro Thr  
 195 200 205  
 Asp Lys Gly Asn Gln Glu Gln Phe Ser Glu Gly Trp Ser Val Glu Glu  
 210 215 220  
 Gly Thr Lys Ser Val Ser Gly Ala Pro Gln Thr Ala Ser Trp Ile Ile  
 225 230 235 240  
 Glu Cys Ser Val Ser Ser Leu Leu Leu Asp Gln Pro Gly Gly Gln Arg

245	250	255
Arg Thr Glu Pro Ser His Val Gly Gln Val Pro Pro Gln Asp Ser Arg		
260	265	270
Leu Pro Thr Ser Gln Ser Asp Leu Ser Ile Ser Gly Val Thr Val Ser		
275	280	285
Ile Leu Pro Ser Ser Ser Gly Tyr Gly Ser Asp Gly Pro His Ile His		
290	295	300
Gly Ile Gln Pro Lys Asp Thr Glu Pro Glu Lys Ser Ser Thr Ser Phe		
305	310	315
Ser Glu Glu Asp Gly Thr Leu Ser Leu Glu Ala Ser His Thr Pro Ser		
325	330	335
Trp Gly Leu Glu Glu Ile Ser Asp Ile Tyr Ile Ser Gly Glu Ser Gly		
340	345	350
Asp Met Ser Ala Lys Glu Lys Leu Leu Leu Trp Thr Gln Lys Val Thr		
355	360	365
Ala Gly Tyr Thr Gly Ile Lys Cys Thr Asn Phe Ser Ser Cys Trp Ser		
370	375	380
Asp Gly Lys Met Phe Asn Ala Leu Ile His Arg Tyr Arg Pro Asp Leu		
385	390	395
Val Asp Met Glu Arg Val Gln Ile Gln Ser Asn Arg Glu Asn Leu Glu		
405	410	415
Gln Ala Phe Glu Val Ala Glu Arg Leu Gly Val Thr Arg Leu Leu Asp		
420	425	430
Ala Glu Asp Val Asp Val Pro Ser Pro Asp Glu Lys Ser Val Ile Thr		
435	440	445
Tyr Val Ser Ser Ile Tyr Asp Ala Phe Pro Lys Val Pro Glu Gly Gly		
450	455	460
Glu Gly Ile Ser Ala Met Glu Val Asp Ser Arg Trp Gln Glu Tyr Gln		
465	470	475
		480

Ser Arg Val Asp Ser Leu Ile Pro Trp Ile Lys Gln His Thr Ile Leu  
 485 490 495  
 Met Ser Asp Lys Thr Phe Pro Gln Asn Pro Val Glu Leu Lys Ala Leu  
 500 505 510  
 Tyr Asn Gln Tyr Ile His Phe Lys Glu Thr Glu Ile Leu Ala Lys Glu  
 515 520 525  
 Arg Glu Lys Gly Arg Ile Glu Glu Leu Tyr Lys Leu Leu Glu Val Trp  
 530 535 540  
 Ile Glu Phe Gly Arg Ile Lys Leu Pro Gln Gly Tyr His Pro Asn Asp  
 545 550 555 560  
 Val Glu Glu Glu Trp Gly Lys Leu Ile Ile Glu Met Leu Glu Arg Glu  
 565 570 575  
 Lys Ser Leu Arg Pro Ala Val Glu Arg Leu Glu Leu Leu Leu Gln Ile  
 580 585 590  
 Ala Asn Lys Ile Gln Asn Gly Ala Leu Asn Cys Glu Glu Lys Leu Thr  
 595 600 605  
 Leu Ala Lys Asn Thr Leu Gln Ala Asp Ala Ala His Leu Glu Ser Gly  
 610 615 620  
 Gln Pro Val Gln Cys Glu Ser Asp Val Ile Met Tyr Ile Gln Glu Cys  
 625 630 635 640  
 Glu Gly Leu Ile Arg Gln Leu Gln Val Asp Leu Gln Ile Leu Arg Asp  
 645 650 655  
 Glu Asn Tyr Tyr Gln Leu Glu Glu Leu Ala Phe Arg Val Met Arg Leu  
 660 665 670  
 Gln Asp Glu Leu Val Thr Leu Arg Leu Glu Cys Thr Asn Leu Tyr Arg  
 675 680 685  
 Lys Gly His Phe Thr Ser Leu Glu Leu Val Pro Pro Ser Thr Leu Thr  
 690 695 700  
 Thr Thr His Leu Lys Ala Glu Pro Leu Thr Lys Ala Thr His Ser Ser

705                      710                      715                      720  
Ser Thr Ser Trp Phe Arg Lys Pro Met Thr Arg Ala Glu Leu Val Ala  
725                      730                      735  
Ile Ser Ser Ser Glu Asp Glu Gly Asn Leu Arg Phe Val Tyr Glu Leu  
740                      745                      750  
Leu Ser Trp Val Glu Glu Met Gln Met Lys Leu Glu Arg Ala Glu Trp  
755                      760                      765  
Gly Asn Asp Leu Leu Ser Val Glu Leu Gln Leu Glu Thr Gln Pro His  
770                      775                      780  
Ile His Thr Ser Val Glu Glu Leu Gly Ser Ser Val Lys Glu Ala Arg  
785                      790                      795                      800  
Leu Tyr Glu Gly Lys Met Ser Gln Asn Phe His Thr Ser Tyr Ala Glu  
805                      810                      815  
Thr Leu Gly Lys Leu Glu Thr Gln Tyr Cys Lys Leu Lys Glu Thr Ser  
820                      825                      830  
Ser Phe Arg Met Arg His Leu Gln Ser Leu His Lys Phe Val Ser Arg  
835                      840                      845  
Ala Thr Ala Glu Leu Ile Trp Leu Asn Glu Lys Glu Glu Glu Glu Leu  
850                      855                      860  
Ala Tyr Asp Trp Ser Asp Asn Asn Ser Asn Ile Ser Ala Lys Arg Asn  
865                      870                      875                      880  
Tyr Phe Ser Glu Leu Thr Met Glu Leu Glu Glu Lys Gln Asp Val Phe  
885                      890                      895  
Arg Ser Leu Gln Asp Thr Ala Glu Leu Leu Ser Leu Glu Asn His Pro  
900                      905                      910  
Ala Lys Gln Thr Val Glu Ala Tyr Ser Ala Ala Val Gln Ser Gln Leu  
915                      920                      925  
Gln Trp Met Lys Gln Pro Cys Leu Cys Val Glu Gln His Val Lys Glu  
930                      935                      940

Asn Thr Ala Tyr Phe Gln Phe Phe Ser Asp Ala Arg Glu Leu Glu Ser  
 945                      950                      955                      960  
 Phe Leu Arg Asn Leu Gln Asp Ser Ile Lys Arg Lys Tyr Ser Cys Asp  
                          965                      970                      975  
 His Asn Thr Ser Leu Ser Arg Leu Glu Asp Leu Leu Gln Asp Ser Met  
                          980                      985                      990  
 Ala Gln Asp Glu Lys Glu Gln Leu Ile Gln Ser Lys Ser Ser Val Ala  
                          995                      1000                      1005  
 Ser Leu Val Gly Arg Ser Lys Thr Ile Val Gln Leu Lys Pro Arg Ser  
                          1010                      1015                      1020  
 Pro Asp His Val Leu Lys Asn Thr Ile Ser Val Lys Ala Val Cys Asp  
 1025                      1030                      1035                      1040  
 Tyr Arg Gln Ile Glu Gly Arg Thr Ile Leu Ser Glu Gly Tyr Gly Pro  
                          1045                      1050                      1055  
 Leu Ala Ser Ala Ala Cys  
                          1060

<210> 2818

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2818

Met Cys Thr Ser Gly Trp Leu Pro Ser Pro Leu Tyr His Leu Leu Leu  
   1                      5                      10                      15  
 Gly Ala Gly Gly Ser Arg Leu Ser Leu Cys Cys Gly Ile Ser Ala Leu  
                          20                      25                      30  
 Gly Gln Thr Cys Leu Phe Ser Ala Gly Lys Gln Ser Pro Ala Leu Leu



35                      40                      45  
 Leu Leu Pro Thr Ala Phe Ala His Gly Leu Gly Arg Ala Leu Leu Glu  
 50                      55                      60  
 Thr Pro Gly Ala Arg Ser Gln Gln Arg Phe Glu Pro Leu Ser Leu Gln  
 65                      70                      75                      80  
 Ala Trp Gly Leu Gly Ser Trp Gln Met Arg Tyr Gln Glu Ala Leu Trp  
 85                      90                      95  
 Gly Arg Pro Arg Leu Phe Asp  
 100

<210> 2819

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2819

Met Leu Glu Ile Thr Ala Leu Pro Cys Ser Phe Arg Arg Gly Glu Ala  
 1                      5                      10                      15  
 Arg Arg Gln Asn Glu Lys Trp Gly Arg Gly Cys Glu Cys Leu Ser His  
 20                      25                      30  
 Pro Pro Met Thr Ala Ser Gly Pro Ala Gly Leu Trp Lys Leu His Glu  
 35                      40                      45  
 Asn Phe Cys Ser Ile Ser Phe Leu Pro Gly Leu Met Leu Pro Ser Gln  
 50                      55                      60  
 Ser Ser His Pro Pro Ser Ser Gln Gln Lys Asp Thr Arg Ile Phe Leu  
 65                      70                      75                      80  
 Asn His Asn Leu Ile Thr Ser Ile Pro Cys Leu Arg Pro Val Cys Ser  
 85                      90                      95

Leu Ser Thr Leu Arg Arg Thr Val Leu Thr Lys Ala His Lys Gly Arg  
                     100                    105                    110  
 Trp Thr Gly Glu Ala Met Gly Met Val Gly Ala Ser Leu Ala Phe Leu  
                     115                    120                    125  
 Asp Thr Pro Ser Ser Gln His Leu His Met Phe Ser Asn Trp Glu Val  
                     130                    135                    140  
 Gln Leu  
 145

<210> 2820

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2820

Met Tyr Glu Gln Gly Gly Lys Arg Glu Gly Ser Cys Lys Asn Arg Arg  
           1                    5                    10                    15  
 Leu Phe Ser Phe Phe Phe Pro Pro Ser Glu Val Arg Ser Asn Phe Tyr  
                     20                    25                    30  
 His Ile Leu Pro Val Pro Phe Trp Val Gly Gly Gly Arg Pro Leu Gly  
                     35                    40                    45  
 Arg Pro Leu Val Arg Ala Arg Gly Leu Tyr Trp Met Gly Arg Met Arg  
           50                    55                    60  
 Ala Ala Ala Leu Ser Ala Ala Asn Pro Thr Pro Pro Thr Glu Arg Gln  
           65                    70                    75                    80  
 Val Ala Pro Val Gly Arg Gly Val Ser Leu Tyr Ser Cys His Pro Pro  
                     85                    90                    95  
 Ala Ala Ser Pro Ala Cys Thr Thr Trp Arg Gln Leu Phe His Val Gly

100 105 110  
Leu Leu Met Ala  
115

<210> 2821

<211> 913

<212> PRT

<213> Homo sapiens

<400> 2821

Met Ala Trp Glu Ala Gly Gln Val Cys Ala Arg Pro Ala Val Pro Arg  
1 5 10 15  
Gly Arg Lys Gly Ser Val Phe Phe Ala Cys Val Ser Val Val Thr Ala  
20 25 30  
Arg Arg Arg Ala Val Ala Arg Arg Ala Ala Leu Gln Ser Pro Thr Pro  
35 40 45  
Trp Leu Ala Pro Leu Pro Ala Pro Ala Thr Thr Glu Ser Ser Thr Gln  
50 55 60  
Glu Ile Gly Glu Glu Leu Ile Asn Gly Val Ile Tyr Ser Ile Ser Leu  
65 70 75 80  
Arg Lys Val Gln Leu His His Gly Gly Asn Lys Gly Gln Arg Trp Phe  
85 90 95  
Gly Tyr Glu Asn Glu Ser Ala Leu Asn Leu Tyr Glu Thr Cys Lys Val  
100 105 110  
Arg Thr Val Lys Ala Gly Thr Leu Glu Lys Leu Val Glu His Leu Val  
115 120 125  
Pro Ala Phe Gln Gly Ser Asp Leu Ser Tyr Val Thr Ile Phe Leu Cys  
130 135 140

Thr Tyr Arg Ala Phe Thr Thr Thr Gln Gln Val Leu Asp Leu Leu Phe  
145 150 155 160  
Lys Arg Tyr Gly Arg Cys Asp Ala Leu Thr Ala Ser Ser Arg Tyr Gly  
165 170 175  
Cys Ile Leu Pro Tyr Ser Asp Glu Asp Gly Gly Pro Gln Asp Gln Leu  
180 185 190  
Lys Asn Ala Ile Ser Ser Ile Leu Gly Thr Trp Leu Asp Gln Tyr Ser  
195 200 205  
Glu Asp Phe Cys Gln Pro Pro Asp Phe Pro Cys Leu Lys Gln Leu Val  
210 215 220  
Ala Tyr Val Gln Leu Asn Met Pro Gly Ser Asp Leu Glu Arg Arg Ala  
225 230 235 240  
His Leu Leu Leu Ala Gln Leu Glu His Ser Glu Pro Ile Glu Ala Glu  
245 250 255  
Pro Glu Ala Leu Ser Pro Val Pro Ala Leu Lys Pro Thr Pro Glu Leu  
260 265 270  
Glu Leu Ala Leu Thr Pro Ala Arg Ala Pro Ser Pro Val Pro Ala Pro  
275 280 285  
Ala Pro Glu Pro Glu Pro Ala Pro Thr Pro Ala Pro Gly Ser Glu Leu  
290 295 300  
Glu Val Ala Pro Ala Pro Ala Pro Glu Leu Gln Gln Ala Pro Glu Pro  
305 310 315 320  
Ala Val Gly Leu Glu Ser Ala Pro Ala Pro Ala Leu Glu Leu Glu Pro  
325 330 335  
Ala Pro Glu Gln Asp Pro Ala Pro Ser Gln Thr Leu Glu Leu Glu Pro  
340 345 350  
Ala Pro Ala Pro Val Pro Ser Leu Gln Pro Ser Trp Pro Ser Pro Val  
355 360 365  
Val Ala Glu Asn Gly Leu Ser Glu Glu Lys Pro His Leu Leu Val Phe

370 375 380  
Pro Pro Asp Leu Val Ala Glu Gln Phe Thr Leu Met Asp Ala Glu Leu  
385 390 395 400  
Phe Lys Lys Val Val Pro Tyr His Cys Leu Gly Ser Ile Trp Ser Gln  
405 410 415  
Arg Asp Lys Lys Gly Lys Glu His Leu Ala Pro Thr Ile Arg Ala Thr  
420 425 430  
Val Thr Gln Phe Asn Ser Val Ala Asn Cys Val Ile Thr Thr Cys Leu  
435 440 445  
Gly Asn Arg Ser Thr Lys Ala Pro Asp Arg Ala Arg Val Val Glu His  
450 455 460  
Trp Ile Glu Val Ala Arg Glu Cys Arg Ile Leu Lys Asn Phe Ser Ser  
465 470 475 480  
Leu Tyr Ala Ile Leu Ser Ala Leu Gln Ser Asn Ser Ile His Arg Leu  
485 490 495  
Lys Lys Thr Trp Glu Asp Val Ser Arg Asp Ser Phe Arg Ile Phe Gln  
500 505 510  
Lys Leu Ser Glu Ile Phe Ser Asp Glu Asn Asn Tyr Ser Leu Ser Arg  
515 520 525  
Glu Leu Leu Ile Lys Glu Gly Thr Ser Lys Phe Ala Thr Leu Glu Met  
530 535 540  
Asn Pro Lys Arg Ala Gln Lys Arg Pro Lys Glu Thr Gly Ile Ile Gln  
545 550 555 560  
Gly Thr Val Pro Tyr Leu Gly Thr Phe Leu Thr Asp Leu Val Met Leu  
565 570 575  
Asp Thr Ala Met Lys Asp Tyr Leu Tyr Gly Arg Leu Ile Asn Phe Glu  
580 585 590  
Lys Arg Arg Lys Glu Phe Glu Val Ile Ala Gln Ile Lys Leu Leu Gln  
595 600 605

Ser Ala Cys Asn Asn Tyr Ser Ile Ala Pro Asp Glu Gln Phe Gly Ala  
610 615 620  
Trp Phe Arg Ala Val Glu Arg Leu Ser Glu Thr Glu Ser Tyr Asn Leu  
625 630 635 640  
Ser Cys Glu Leu Glu Pro Pro Ser Glu Ser Ala Ser Asn Thr Leu Arg  
645 650 655  
Thr Lys Lys Asn Thr Ala Ile Val Lys Arg Trp Ser Asp Arg Gln Ala  
660 665 670  
Pro Ser Thr Glu Leu Ser Thr Ser Gly Ser Ser His Ser Lys Ser Cys  
675 680 685  
Asp Gln Leu Arg Cys Gly Pro Tyr Leu Ser Ser Gly Asp Ile Ala Asp  
690 695 700  
Ala Leu Ser Val His Ser Ala Gly Ser Ser Ser Ser Asp Val Glu Glu  
705 710 715 720  
Ile Asn Ile Ser Phe Val Pro Glu Ser Pro Asp Gly Gln Glu Lys Lys  
725 730 735  
Phe Trp Glu Ser Ala Ser Gln Ser Ser Pro Glu Thr Ser Gly Ile Ser  
740 745 750  
Ser Ala Ser Ser Ser Thr Ser Ser Ser Ser Ala Ser Thr Thr Pro Val  
755 760 765  
Ala Ala Thr Arg Thr His Lys Arg Ser Val Ser Gly Leu Cys Asn Ser  
770 775 780  
Ser Ser Ala Leu Pro Leu Tyr Asn Gln Gln Val Gly Asp Cys Cys Ile  
785 790 795 800  
Ile Arg Val Ser Leu Asp Val Asp Asn Gly Asn Met Tyr Lys Ser Ile  
805 810 815  
Leu Val Thr Ser Gln Asp Lys Ala Pro Ala Val Ile Arg Lys Ala Met  
820 825 830  
Asp Lys His Asn Leu Glu Glu Glu Glu Pro Glu Asp Tyr Glu Leu Leu

835                      840                      845  
 Gln Ile Leu Ser Asp Asp Arg Lys Leu Lys Ile Pro Glu Asn Ala Asn  
 850                      855                      860  
 Val Phe Tyr Ala Met Asn Ser Thr Ala Asn Tyr Asp Phe Val Leu Lys  
 865                      870                      875                      880  
 Lys Arg Thr Phe Thr Lys Gly Val Lys Val Lys His Gly Ala Ser Ser  
                          885                      890                      895  
 Thr Leu Pro Arg Met Lys Gln Lys Gly Leu Lys Ile Ala Lys Gly Ile  
                          900                      905                      910  
 Phe

<210> 2822

<211> 150

<212> PRT

<213> Homo sapiens

<400> 2822

Met Arg Asn Arg Pro Ser Val Leu Ala His Leu Pro Phe Ala Gly Tyr  
     1                      5                      10                      15  
 Leu Pro Ala Arg Ala Met Leu Ser Thr Leu Arg Lys Trp Ala Gln Arg  
                          20                      25                      30  
 Glu Gln Gly Thr Ser Leu Glu Ala His Ser Leu Glu Val Thr Val Pro  
                          35                      40                      45  
 Gly Phe Glu Leu Ile Val Val Leu Ser Pro Pro Tyr Tyr Ile Phe Cys  
                          50                      55                      60  
 Arg Val Asp Ser Leu Met Trp Ile Met Ala Gly Leu Pro Leu Gln Pro  
                          65                      70                      75                      80

Glu Ser Pro Ser His Cys Trp Ala Pro Cys Glu Ala Ala Gly Gly Glu  
                             85                            90                            95  
 Arg Ser Gly Phe Ser Gly Ala Val Glu His Ser Gly Tyr Trp Val Cys  
                             100                            105                            110  
 Arg Ser Cys Gly Gln Gly Ser Asp Glu Thr Val Ser Ala Val Cys Val  
                             115                            120                            125  
 Gln Gly Thr Thr Ala Cys Pro Val Cys Cys Pro Thr Pro Pro Thr Trp  
                             130                            135                            140  
 Arg Ser Ser Ser Arg Glu  
 145                            150

<210> 2823

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2823

Met Glu Leu Gly Val Gln Val Thr Ala Trp Thr Tyr Pro Gly Ser Leu  
           1                            5                            10                            15  
 Pro Leu Pro Val Leu Asp Gly Asp Pro Ile Pro Gly Thr Ser Ala Leu  
                             20                            25                            30  
 Pro Lys Ile Phe Ser Val Ser Glu Ser Leu Arg Ser Glu Thr Ala His  
                             35                            40                            45  
 His Pro Thr Pro Pro His Leu Leu Ser Pro Ala Gln Cys Ser Arg Arg  
                             50                            55                            60  
 Val Pro Gly Leu Gly Pro Arg Leu Ser Val Gln Gly Arg Ala Asp Leu  
                             65                            70                            75                            80  
 Ser Trp Phe Ala Gly Leu Ala Gln Met Ala Leu Gly Arg Gln Gly Leu



85 90 95  
 Arg Ala Gln Gly Arg Val Leu Leu His Glu Pro  
 100 105

<210> 2824

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2824

Met Thr Ser Ser Leu His Leu Pro Arg Pro Pro Leu His Pro Glu Arg  
 1 5 10 15  
 Thr Val Ala Ala Pro Ala Arg Glu Glu Gln Gly Pro Gln Leu Pro Trp  
 20 25 30  
 Gly Gln Gly Trp Gly Gly Trp Val Lys Ala Pro Asp Ala Ser Ala Arg  
 35 40 45  
 Cys Pro Arg Ala Ala Asp Gly Pro Gln Val Thr Val Lys Thr Cys Cys  
 50 55 60  
 Gly Ser Ser Asp Pro Ser Lys Glu Ser Ala Glu Ser Trp Glu Phe Ser  
 65 70 75 80  
 Ser Ser Ser Cys Thr Ser Arg Ser Pro Cys Pro Leu Pro Cys Ser Pro  
 85 90 95  
 Ala Arg Pro Pro Val Glu Arg Arg Pro Leu Gln Leu Trp Met Trp Leu  
 100 105 110  
 Ser Pro Val Ser Thr Arg Pro Leu Glu Pro Gly Pro Ser Gly Pro Val  
 115 120 125  
 Glu Ala Pro Met Arg Phe  
 130

&lt;210&gt; 2825

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2825

Met Tyr Ser Phe Phe Pro Leu Thr Pro Leu Phe Ser Phe Leu Ser Ile

1 5 10 15

Lys Ile Phe Met Leu Leu Pro Gly Leu Leu Ser Ala Pro Leu Pro Asp

20 25 30

Val Pro Pro Phe Ala His His Glu Lys Tyr Asn Thr His Val Tyr Cys

35 40 45

Ser Phe Thr His Asn Ala Ile Asn Thr Cys Pro Phe Ser Ile Ser Cys

50 55 60

Ile Val Pro Leu Glu Ser Asn Leu Arg Ser Tyr Phe Ser Asn Ser Ser

65 70 75 80

Glu Val Phe Ser Ser Arg Pro Ser Pro Pro Trp Lys Trp Cys Gly Phe

85 90 95

Leu Arg Lys Phe Ser Glu Glu Ser Thr Pro Ala Ser Gly Phe Pro His

100 105 110

Pro His

&lt;210&gt; 2826

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2826

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Met Lys Pro Thr Trp Arg Val His Gly Ile Ile Lys Asn Gly Gly Val
  1             5             10             15
Lys Pro Asn Ile Ile Pro Ser Tyr Ser Glu Leu Ile Tyr Tyr Phe Arg
          20             25             30
Ala Pro Ser Met Lys Glu Leu Gln Val Leu Thr Lys Lys Ala Glu Asp
          35             40             45
Cys Phe Arg Ala Ala Ala Leu Ala Ser Gly Cys Thr Val Glu Ile Lys
          50             55             60
Gly Gly Ala His Asp Tyr Tyr Asn Val Leu Pro Asn Lys Ser Leu Trp
          65             70             75             80
Lys Ala Tyr Met Glu Asn Gly Arg Lys Leu Gly Ile Glu Phe Ile Ser
          85             90             95
Glu Asp Thr Met Leu Asn Gly Pro Ser Gly Ser Thr Asp Phe Gly Asn
          100            105            110
Val Ser Phe Val Val Pro Gly Ile His Pro Tyr Phe His Ile Gly Ser
          115            120            125
Asn Ala Leu Asn His Thr Glu Gln Tyr Thr Glu Ala Ala Gly Ser Gln
          130            135            140
Glu Ala Gln Phe Tyr Thr Leu Arg Thr Ala Lys Ala Leu Ala Met Thr
          145            150            155            160
Ala Leu Asp Val Ile Phe Lys Pro Glu Leu Leu Glu Gly Ile Arg Glu
          165            170            175
Asp Phe Lys Leu Lys Leu Gln Glu Glu Gln Phe Val Asn Ala Val Glu
          180            185            190

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&lt;210&gt; 2827

&lt;211&gt; 578

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2827

Met Ala Asp Thr Phe Thr Glu Ile Met Thr Met Met Ser Pro Ser Gln

1 5 10 15

Phe Leu Ser Ser Ser Pro Leu Arg Met Thr Asn Asn Glu Asp Ser Leu

20 25 30

Ser Pro Thr Ser Ser Thr Leu Ser Asn Leu Glu Leu Asp Ala Ala Glu

35 40 45

Lys Asp Arg Lys Leu Gln Glu Lys Glu Lys Gln Ile Glu Glu Leu Lys

50 55 60

Arg Lys Leu Glu Gln Glu Gln Lys Leu Val Glu Val Leu Lys Met Gln

65 70 75 80

Leu Glu Val Glu Lys Arg Gly Gln Gln Gln Arg Pro Leu Glu Ala Gln

85 90 95

Pro Ser Ala Pro Gly His Ser Val Lys Ser Asp Gln Lys His Gly Ser

100 105 110

Leu Gly Ser Ser Ile Lys Asp Glu Ala Ser Leu Pro Asp Cys Ser Ser

115 120 125

Ser Arg Gln Pro Ile Pro Val Ala Ser His Ala Val Gly Gln Pro Val

130 135 140

Ser Thr Gly Gly Gln Thr Leu Val Ala Lys Lys Ala Val Val Ile Lys

145 150 155 160

Gln Glu Val Pro Val Gly Gln Ala Glu Gln Gln Ser Val Val Ser Gln

165 170 175

Phe Tyr Val Ser Ser Gln Gly Gln Pro Pro Pro Ala Val Val Ala Gln

180 185 190  
Pro Gln Ala Leu Leu Thr Thr Gln Thr Ala Gln Leu Leu Leu Pro Val  
195 200 205  
Ser Ile Gln Gly Ser Ser Val Thr Ser Val Gln Leu Pro Val Gly Ser  
210 215 220  
Leu Lys Leu Gln Thr Ser Pro Gln Ala Gly Met Gln Thr Gln Pro Gln  
225 230 235 240  
Ile Ala Thr Ala Ala Gln Ile Pro Thr Ala Ala Leu Ala Ser Gly Leu  
245 250 255  
Ala Pro Thr Val Pro Gln Thr Gln Asp Thr Phe Pro Gln His Val Leu  
260 265 270  
Ser Gln Pro Gln Gln Val Arg Lys Val Phe Thr Asn Ser Ala Ser Ser  
275 280 285  
Asn Thr Val Leu Pro Tyr Gln Arg His Pro Ala Pro Ala Val Gln Gln  
290 295 300  
Pro Phe Ile Asn Lys Ala Ser Asn Ser Val Leu Gln Ser Arg Asn Ala  
305 310 315 320  
Pro Leu Pro Ser Leu Gln Asn Gly Pro Asn Thr Pro Asn Lys Pro Ser  
325 330 335  
Ser Pro Pro Pro Pro Gln Gln Phe Val Val Gln His Ser Leu Phe Gly  
340 345 350  
Ser Pro Val Ala Lys Thr Lys Asp Pro Pro Arg Tyr Glu Glu Ala Ile  
355 360 365  
Lys Gln Thr Arg Ser Thr Gln Ala Pro Leu Pro Glu Ile Ser Asn Ala  
370 375 380  
His Ser Gln Gln Met Asp Asp Leu Phe Asp Ile Leu Ile Lys Ser Gly  
385 390 395 400  
Glu Ile Ser Leu Pro Ile Lys Glu Glu Pro Ser Pro Ile Ser Lys Met  
405 410 415

Arg Pro Val Thr Ala Ser Ile Thr Thr Met Pro Val Asn Thr Val Val

420

425

430

Ser Arg Pro Pro Pro Gln Val Gln Met Ala Pro Pro Val Ser Leu Glu

435

440

445

Pro Met Gly Ser Leu Ser Ala Ser Leu Glu Asn Gln Leu Glu Ala Phe

450

455

460

Leu Asp Gly Thr Leu Pro Ser Ala Asn Glu Ile Pro Pro Leu Gln Ser

465

470

475

480

Ser Ser Glu Asp Arg Glu Pro Phe Ser Leu Ile Glu Asp Leu Gln Asn

485

490

495

Asp Leu Leu Ser His Ser Gly Met Leu Asp His Ser His Ser Pro Met

500

505

510

Glu Thr Ser Glu Thr Gln Phe Ala Ala Gly Thr Pro Cys Leu Ser Leu

515

520

525

Asp Leu Ser Asp Ser Asn Leu Asp Asn Met Glu Trp Leu Asp Ile Thr

530

535

540

Met Pro Asn Ser Ser Ser Gly Leu Thr Pro Leu Ser Thr Thr Ala Pro

545

550

555

560

Ser Met Phe Ser Ala Asp Phe Leu Asp Pro Gln Asp Leu Pro Leu Pro

565

570

575

Trp Asp

&lt;210&gt; 2828

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2828

Met Gly Asp Lys Lys Ser Pro Thr Arg Pro Lys Arg Gln Pro Lys Pro  
1 5 10 15  
Ser Ser Asp Glu Gly Tyr Trp Asp Cys Ser Val Cys Thr Phe Arg Asn  
20 25 30  
Ser Ala Glu Ala Phe Lys Cys Met Met Cys Asp Val Arg Lys Gly Thr  
35 40 45  
Ser Thr Arg Asp Ser Lys Glu Gly Gly Lys Leu Val Ser Tyr Ser Thr  
50 55 60  
Ala Ser Leu Gly Val Arg Gly Thr Leu Arg Asn Arg Val Gly Gly Gly  
65 70 75 80  
Ser Ser Glu Glu Lys Lys Gln Ala Glu Tyr Leu Ala Pro Gly Arg Arg  
85 90 95  
Arg Asn Ile Val His Arg Gly Val Gly Pro Gly Gln Arg Ser Gly Pro  
100 105 110  
Ser Leu Lys Glu Ala  
115

&lt;210&gt; 2829

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2829

Met Ser Lys Asn Phe Leu His Thr Tyr Cys Val Pro Gly Ser Val Leu  
1 5 10 15  
Ser Leu Cys Ser Ala Cys Tyr Leu Met Gln Pro Leu Gln Gln Leu Ser  
20 25 30

Leu Leu Gly Gly His Ser Phe Leu Lys Gln Ala Gly Ala Gln Asn Arg  
                   35                                  40                                  45  
 Leu Phe Gln Ala Ser Ser Met Pro Tyr Tyr His Arg Glu Ser Ile Glu  
                   50                                  55                                  60  
 Tyr Ser Ser Ser Asn Lys Lys Glu Gln Gly Asn Thr Cys Ser Met Gln  
                   65                                  70                                  75                                  80  
 Thr Ser Thr Phe Val Ser Ser Gln Arg Lys Glu Gln Asp His Pro Phe  
                                   85                                  90                                  95  
 Pro Pro Arg Glu Asn Ile Pro Phe Ser Leu Leu Leu Leu Val Leu Arg  
                                   100                                  105                                  110  
 Pro Gly Thr Val Val Leu His Leu Leu Gly Ser His Cys Leu Ser Leu  
                                   115                                  120                                  125  
 Cys Gln Ile Leu Phe Pro Phe Cys Asp Thr Arg Ile Glu Ile Thr Arg  
                                   130                                  135                                  140  
 Met Ala Met Asp Trp Gly Gly Ile Pro Thr Lys  
                   145                                  150                                  155

<210> 2830

<211> 166

<212> PRT

<213> Homo sapiens

<400> 2830

Met Gln Met Gln Pro Gly Pro Gly Arg Ala Pro Leu Gly Ala Lys Val  
                   1                                  5                                  10                                  15  
 Pro Ala Leu Arg Cys Leu Leu Ala Gln Glu Ala Gly Ala Ala Gly Leu  
                                   20                                  25                                  30  
 Ser Glu Pro Thr Cys Ala Arg Ala Arg Thr Ser Arg Ser Arg Ser Ala



35                                      40                                      45  
 Pro Arg Gly Pro Gln Ser Gly Gly Ala Glu Arg Lys Ala Ala Gly Thr  
 50                                      55                                      60  
 Gln Ala Glu Glu Leu Gly Cys Pro Pro Gly Ser Trp His Asp Ala Pro  
 65                                      70                                      75                                      80  
 Arg Ser Pro Pro Ala Asp Ser Ser Leu Gly Pro Gln Ser Pro Pro Lys  
 85                                      90                                      95  
 Ser Pro Ala Glu Ala Glu Ile Thr Arg Ser Pro Ala Arg Arg Tyr Arg  
 100                                      105                                      110  
 Pro Ala Thr Glu Ala Thr Leu Leu Thr Ala Gly Pro Ala Arg Thr Lys  
 115                                      120                                      125  
 Ser Ala Arg Ser Ser Ser Arg Lys Ala Asp Ser Arg Lys Gln Arg Asp  
 130                                      135                                      140  
 Pro Arg Thr Ser Arg Val Ala Ser Gly Pro Pro Arg Thr Gly Ala Gly  
 145                                      150                                      155                                      160  
 Ser Ser Gly Ala Ser Met  
 165

<210> 2831

<211> 316

<212> PRT

<213> Homo sapiens

<400> 2831

Met Tyr Lys Thr Ile Ser Gln Glu Phe Leu Thr Pro Gly Lys Leu Glu  
 1                                      5                                      10                                      15  
 Ile Asn Phe Glu Glu Leu Leu Lys Gln Lys Met Glu Glu Glu Lys Arg  
 20                                      25                                      30

Arg Thr Glu Glu Glu Arg Lys His Lys Leu Glu Met Glu Lys Gln Glu  
 35 40 45  
 Phe Glu Gln Leu Arg Gln Glu Met Gly Glu Glu Glu Glu Glu Asn Glu  
 50 55 60  
 Thr Phe Gly Leu Ser Arg Glu Tyr Glu Glu Leu Ile Lys Leu Lys Arg  
 65 70 75 80  
 Ser Gly Ser Ile Gln Ala Lys Asn Leu Lys Ser Lys Phe Glu Lys Ile  
 85 90 95  
 Gly Gln Leu Ser Glu Lys Glu Ile Gln Lys Lys Ile Glu Glu Glu Arg  
 100 105 110  
 Ala Arg Arg Arg Ala Ile Asp Leu Glu Ile Lys Glu Arg Glu Ala Glu  
 115 120 125  
 Asn Phe His Glu Glu Asp Asp Val Asp Val Arg Pro Ala Arg Lys Ser  
 130 135 140  
 Glu Ala Pro Phe Thr His Lys Val Asn Met Lys Ala Arg Phe Glu Gln  
 145 150 155 160  
 Met Ala Lys Ala Arg Glu Glu Glu Glu Gln Arg Arg Ile Glu Glu Gln  
 165 170 175  
 Lys Leu Leu Arg Met Gln Phe Glu Gln Arg Glu Ile Asp Ala Ala Leu  
 180 185 190  
 Gln Lys Lys Arg Glu Glu Glu Glu Glu Glu Glu Gly Ser Ile Met Asn  
 195 200 205  
 Gly Ser Thr Ala Glu Asp Glu Glu Gln Thr Arg Ser Gly Ala Pro Trp  
 210 215 220  
 Phe Lys Lys Pro Leu Lys Asn Thr Ser Val Val Asp Ser Glu Pro Val  
 225 230 235 240  
 Arg Phe Thr Val Lys Val Thr Gly Glu Pro Lys Pro Glu Ile Thr Trp  
 245 250 255  
 Trp Phe Glu Gly Glu Ile Leu Gln Asp Gly Glu Asp Tyr Gln Tyr Ile

260                      265                      270  
 Glu Arg Gly Glu Thr Tyr Cys Leu Tyr Leu Pro Glu Thr Phe Pro Glu  
 275                      280                      285  
 Asp Gly Gly Glu Tyr Met Cys Lys Ala Val Asn Asn Lys Gly Ser Ala  
 290                      295                      300  
 Ala Ser Thr Cys Ile Leu Thr Ile Glu Ser Lys Asn  
 305                      310                      315

<210> 2832

<211> 496

<212> PRT

<213> Homo sapiens

<400> 2832

Met Ser Ser Met Glu Glu Ile Gln Val Glu Leu Gln Cys Ala Asp Leu  
 1                      5                      10                      15  
 Trp Lys Arg Phe His Asp Ile Gly Thr Glu Met Ile Ile Thr Lys Ala  
 20                      25                      30  
 Gly Arg Arg Met Phe Pro Ala Met Arg Val Lys Ile Thr Gly Leu Asp  
 35                      40                      45  
 Pro His Gln Gln Tyr Tyr Ile Ala Met Asp Ile Val Pro Val Asp Asn  
 50                      55                      60  
 Lys Arg Tyr Arg Tyr Val Tyr His Ser Ser Lys Trp Met Val Ala Gly  
 65                      70                      75                      80  
 Asn Ala Asp Ser Pro Val Pro Pro Arg Val Tyr Ile His Pro Asp Ser  
 85                      90                      95  
 Leu Ala Ser Gly Asp Thr Trp Met Arg Gln Val Val Ser Phe Asp Lys  
 100                      105                      110

Leu Lys Leu Thr Asn Asn Glu Leu Asp Asp Gln Gly His Ile Ile Leu  
115 120 125  
His Ser Met His Lys Tyr Gln Pro Arg Val His Val Ile Arg Lys Asp  
130 135 140  
Phe Ser Ser Asp Leu Ser Pro Thr Lys Pro Val Pro Val Gly Asp Gly  
145 150 155 160  
Val Lys Thr Phe Asn Phe Pro Glu Thr Val Phe Thr Thr Val Thr Ala  
165 170 175  
Tyr Gln Asn Gln Gln Ile Thr Arg Leu Lys Ile Asp Arg Asn Pro Phe  
180 185 190  
Ala Lys Gly Phe Arg Asp Ser Gly Arg Asn Arg Thr Gly Leu Glu Ala  
195 200 205  
Ile Met Glu Thr Tyr Ala Phe Trp Arg Pro Pro Val Arg Thr Leu Thr  
210 215 220  
Phe Glu Asp Phe Thr Thr Met Gln Lys Gln Gln Gly Gly Ser Thr Gly  
225 230 235 240  
Thr Ser Pro Thr Thr Ser Ser Thr Gly Thr Pro Ser Pro Ser Ala Ser  
245 250 255  
Ser His Leu Leu Ser Pro Ser Cys Ser Pro Pro Thr Phe His Leu Ala  
260 265 270  
Pro Asn Thr Phe Asn Val Gly Cys Arg Glu Ser Gln Leu Cys Asn Leu  
275 280 285  
Asn Leu Ser Asp Tyr Pro Pro Cys Ala Arg Ser Asn Met Ala Ala Leu  
290 295 300  
Gln Ser Tyr Pro Gly Leu Ser Asp Ser Gly Tyr Asn Arg Leu Gln Ser  
305 310 315 320  
Gly Thr Thr Ser Ala Thr Gln Pro Ser Glu Thr Phe Met Pro Gln Arg  
325 330 335  
Thr Pro Ser Leu Ile Ser Gly Ile Pro Thr Pro Pro Ser Leu Pro Gly

340 345 350  
Asn Ser Lys Met Glu Ala Tyr Gly Gly Gln Leu Gly Ser Phe Pro Thr  
355 360 365  
Ser Gln Phe Gln Tyr Val Met Gln Ala Gly Asn Ala Ala Ser Ser Ser  
370 375 380  
Ser Ser Pro His Met Phe Gly Gly Ser His Met Gln Gln Ser Ser Tyr  
385 390 395 400  
Asn Ala Phe Ser Leu His Asn Pro Tyr Asn Leu Tyr Gly Tyr Asn Phe  
405 410 415  
Pro Thr Ser Pro Arg Leu Ala Ala Ser Pro Glu Lys Leu Ser Ala Ser  
420 425 430  
Gln Ser Thr Leu Leu Cys Ser Ser Pro Ser Asn Gly Ala Phe Gly Glu  
435 440 445  
Arg Gln Tyr Leu Pro Ser Gly Met Glu His Ser Met His Met Ile Ser  
450 455 460  
Pro Ser Pro Asn Asn Gln Gln Ala Thr Asn Thr Cys Asp Gly Arg Gln  
465 470 475 480  
Tyr Gly Ala Val Pro Gly Ser Ser Ser Gln Met Ser Val His Met Val  
485 490 495

&lt;210&gt; 2833

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

Met Arg Ala Leu Arg Leu Gly Ala Glu Asp Gln Pro Leu Pro Ala Trp

1

5

10

15

Ile Pro Gln Leu Arg Ala Val Tyr Cys Arg Pro Ile Pro Ala Arg Pro  
                     20                    25                    30  
 Ala Cys Gln Ala Ala Cys Pro Gly Cys Arg Arg His Ala Ala Gly Leu  
                     35                    40                    45  
 Gly Pro Val Val Arg Cys Glu Pro Cys Asp Ala Arg Ala Leu Ala Arg  
                     50                    55                    60  
 Cys Ala Pro Pro Pro Ala Val Cys Ala Glu Leu Val Arg Glu Pro Gly  
                     65                    70                    75                    80  
 Cys Gly Cys Cys Leu Thr Cys Ala Leu Ser Glu Gly Gln Pro Cys Gly  
                                     85                    90                    95  
 Ile Tyr Thr Glu Arg Cys Gly Ser Gly Leu Arg Cys Gln Pro Ser Pro  
                     100                    105                    110  
 Asp Glu Ala Arg Pro Pro Ala Pro Gly Asn Ala Ser Glu Ser Glu Glu  
                     115                    120                    125  
 Asp Arg Ser Ala Gly Ser Val Glu Ser Pro Ser Val Ser Ser Thr His  
                     130                    135                    140  
 Arg Val Ser Asp Pro Lys Phe His Pro Leu His Ser Lys Ile Ile Ile  
                     145                    150                    155                    160  
 Ile Lys Lys Gly His Ala Lys Asp Ser Gln Arg Tyr Lys Val Asp Tyr  
                                     165                    170                    175  
 Glu Ser Gln Ser Thr Asp Thr Gln Asn Phe Ser Ser Glu Ser Lys Arg  
                     180                    185                    190  
 Glu Thr Glu Tyr Gly Pro Cys Arg Arg Glu Met Glu Asp Thr Leu Asn  
                     195                    200                    205  
 His Leu Lys Phe Leu Asn Val Leu Ser Pro Arg Gly Val His Ile Pro  
                     210                    215                    220  
 Asn Cys Asp Lys Lys Gly Phe Tyr Lys Lys Lys Gln Cys Arg Pro Ser  
                     225                    230                    235                    240  
 Lys Gly Arg Lys Arg Gly Phe Cys Trp Cys Val Asp Lys Tyr Gly Gln

245 250 255  
Pro Leu Pro Gly Tyr Thr Thr Lys Gly Lys Glu Asp Val His Cys Tyr  
260 265 270  
Ser Met Gln Ser Lys  
275

&lt;210&gt; 2834

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2834

Met Leu Arg Asp Ser Leu Leu Arg Ser His Ile Leu Ala Ser Lys Arg  
1 5 10 15  
Lys Thr Gln Ile Thr Val Leu Gly Ser Ser Trp Thr Cys Ser Leu Cys  
20 25 30  
Thr Phe His Ser Asp Leu Leu Tyr Ile Phe Ser Cys Ala Cys Ser Ala  
35 40 45  
Leu Glu Trp His Cys Gly Gln Ala Glu Leu Pro Val Leu Thr Thr Pro  
50 55 60  
Leu Ser Arg Gly Glu Thr Glu Ala Gln Arg Asp Ala Ala Gly Leu Ala  
65 70 75 80  
Pro Ser Gln Ser Met Arg Gln Asn Gln Glu Arg Pro Asn Pro Ser Ala  
85 90 95  
Lys Ala Arg Met Leu Ser Arg Val Pro Ala Leu Pro Leu Ser Ile Phe  
100 105 110  
Phe Pro Leu Glu Arg Cys Asp Glu Gln Arg Phe Pro Leu Arg Thr Pro  
115 120 125

Asn Ile Gln Val

130

&lt;210&gt; 2835

&lt;211&gt; 351

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2835

Met Arg Gly Thr Leu Cys Gln Gly Arg Asp Pro Ile Ile Gln Asp Ser

1 5 10 15

Trp Gln Gly Glu Cys Lys Thr Cys Leu Val Ser Thr Thr Phe Gln Arg

20 25 30

Arg Gln Leu Pro Lys Glu Gly Phe Gln Asn Ala Gly Pro Trp Glu Thr

35 40 45

Gly Ser Gln Ser Asp Ser Ser His Lys Pro Gln Gly Ala Ser Ser Ala

50 55 60

Pro Pro Arg Thr Trp Pro His Gln Gly Ala Gln Gly Asn Glu Glu Asp

65 70 75 80

Asn His Ser Tyr Tyr Val Ser Arg Leu Tyr Gly Pro Ser Glu Pro His

85 90 95

Ser Arg Glu Leu Trp Val Asp Val Ala Glu Ala Asn Arg Ser Gln Val

100 105 110

Lys Ile His Thr Ile Leu Ser Asn Thr His Arg Gln Ala Ser Arg Val

115 120 125

Val Leu Ser Phe Asp Phe Pro Phe Tyr Gly His Pro Leu Arg Gln Ile

130 135 140

Thr Ile Ala Thr Gly Gly Phe Ile Phe Met Gly Asp Val Ile His Arg



145	150	155	160
Met Leu Thr Ala Thr Gln Tyr Val Ala Pro Leu Met Ala Asn Phe Asn			
	165	170	175
Pro Gly Tyr Ser Asp Asn Ser Thr Val Val Tyr Phe Asp Asn Gly Thr			
	180	185	190
Val Phe Val Val Gln Trp Asp His Val Tyr Leu Gln Gly Trp Glu Asp			
	195	200	205
Lys Gly Ser Phe Thr Phe Gln Ala Ala Leu His His Asp Gly Arg Ile			
	210	215	220
Val Phe Ala Tyr Lys Glu Ile Pro Met Ser Val Pro Glu Ile Ser Ser			
225	230	235	240
Ser Gln His Pro Val Lys Thr Gly Leu Ser Asp Ala Phe Met Ile Leu			
	245	250	255
Asn Pro Ser Pro Asp Val Pro Glu Ser Arg Arg Arg Ser Ile Phe Glu			
	260	265	270
Tyr His Arg Ile Glu Leu Asp Pro Ser Lys Val Thr Ser Met Ser Ala			
	275	280	285
Val Glu Phe Thr Pro Leu Pro Thr Cys Leu Gln His Arg Ser Cys Asp			
	290	295	300
Ala Cys Met Ser Ser Asp Leu Thr Phe Asn Cys Ser Trp Cys His Val			
305	310	315	320
Leu Gln Arg Ser Leu Asn Asn Gln Asp Glu Asn Thr Tyr Val Asn Cys			
	325	330	335
Leu Asp Ser Gln Gln Cys His Gly Ser Ser Glu Ser Arg Arg Pro			
	340	345	350

&lt;210&gt; 2836

&lt;211&gt; 373

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2836

Met Ala Leu Ser Arg Val Cys Trp Ala Arg Ser Ala Val Trp Gly Ser

1 5 10 15

Ala Val Thr Pro Gly His Phe Val Thr Arg Arg Leu Gln Leu Gly Arg

20 25 30

Ser Gly Leu Ala Trp Gly Ala Pro Arg Ser Ser Lys Leu His Leu Ser

35 40 45

Pro Lys Ala Asp Val Lys Asn Leu Met Ser Tyr Val Val Thr Lys Thr

50 55 60

Lys Ala Ile Asn Gly Lys Tyr His Arg Phe Leu Gly Arg His Phe Pro

65 70 75 80

Arg Phe Tyr Val Leu Tyr Thr Ile Phe Met Lys Gly Leu Gln Met Leu

85 90 95

Trp Ala Asp Ala Lys Lys Ala Arg Arg Ile Lys Thr Asn Met Trp Lys

100 105 110

His Asn Ile Lys Phe His Gln Leu Pro Tyr Arg Glu Met Glu His Leu

115 120 125

Arg Gln Val Trp Ala Arg Gly Arg Tyr Pro Glu Val His Gly Glu Phe

130 135 140

Arg Gln Asp Val Thr Lys Cys Leu Phe Leu Gly Ile Ile Ser Ile Pro

145 150 155 160

Pro Phe Ala Asn Tyr Leu Val Phe Leu Leu Met Tyr Leu Phe Pro Arg

165 170 175

Gln Leu Leu Ile Arg His Phe Trp Thr Pro Lys Gln Gln Thr Asp Phe

180 185 190

Leu Asp Ile Tyr His Ala Phe Arg Lys Gln Ser His Pro Glu Ile Ile

195 200 205  
Ser Tyr Leu Glu Lys Val Ile Pro Leu Ile Ser Asp Ala Gly Leu Arg  
210 215 220  
Trp Arg Leu Thr Asp Leu Cys Thr Lys Ile Gln Arg Gly Thr His Pro  
225 230 235 240  
Ala Ile His Asp Ile Leu Ala Leu Arg Glu Cys Phe Ser Asn His Pro  
245 250 255  
Leu Gly Met Asn Gln Leu Gln Ala Leu His Val Lys Ala Leu Ser Arg  
260 265 270  
Ala Met Leu Leu Thr Ser Tyr Leu Pro Pro Pro Leu Leu Arg His Arg  
275 280 285  
Leu Lys Thr His Thr Thr Val Ile His Gln Leu Asp Lys Ala Leu Ala  
290 295 300  
Lys Leu Gly Ile Gly Gln Leu Thr Ala Gln Glu Val Lys Ser Ala Cys  
305 310 315 320  
Tyr Leu Arg Gly Leu Asn Ser Thr His Ile Gly Glu Asp Arg Cys Arg  
325 330 335  
Thr Trp Leu Gly Glu Trp Leu Gln Ile Ser Cys Ser Leu Lys Glu Ala  
340 345 350  
Glu Leu Ser Leu Leu Leu His Asn Val Val Leu Leu Ser Thr Asn Tyr  
355 360 365  
Leu Gly Thr Arg Arg  
370

&lt;210&gt; 2837

&lt;211&gt; 733

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2837

Met Arg Lys Trp Trp Ala Pro Cys Pro Gly Ser Trp Leu Cys Ser His  
 1 5 10 15  
 Cys Leu Gly Glu Gly Trp Ala Leu Arg Gly Ala Gly Ser Thr Ala Leu  
 20 25 30  
 Arg Pro Ala Ser Pro Gln Thr Phe His Gly Asn Val Asp Lys Asp Thr  
 35 40 45  
 Pro Val Leu Ser Glu Leu Pro Glu Pro Val Val Ala Arg Phe Ile Arg  
 50 55 60  
 Ile Tyr Pro Leu Thr Trp Asn Gly Ser Leu Cys Met Arg Leu Glu Val  
 65 70 75 80  
 Leu Gly Cys Ser Val Ala Arg Glu Cys Gly Gly Leu Ala Gly Ala Leu  
 85 90 95  
 Ser Gly Gly Gly Val Leu Gly Trp Ala Ser Arg His Pro Ala Lys Asp  
 100 105 110  
 Asn Pro Ala Ser Leu Ala Ala Val Tyr Ser Tyr Tyr Ala Gln Asn Glu  
 115 120 125  
 Val Val Ala Thr Asp Asp Leu Asp Phe Arg His His Ser Tyr Lys Gly  
 130 135 140  
 Met Arg Gln Leu Met Lys Val Val Asn Glu Glu Cys Pro Thr Ile Thr  
 145 150 155 160  
 Arg Thr Tyr Ser Leu Gly Lys Ser Ser Arg Gly Leu Lys Ile Tyr Ala  
 165 170 175  
 Met Glu Ile Ser Asp Asn Pro Gly Glu His Glu Leu Gly Glu Pro Glu  
 180 185 190  
 Phe Arg Tyr Thr Ala Gly Ile His Gly Asn Glu Val Leu Gly Arg Glu  
 195 200 205  
 Leu Leu Leu Leu Leu Met Gln Tyr Leu Cys Arg Glu Tyr Arg Asp Gly

210 215 220  
Asn Pro Arg Val Arg Ser Leu Val Gln Asp Thr Arg Ile His Leu Val  
225 230 235 240  
Pro Ser Leu Asn Pro Asp Gly Tyr Glu Val Ala Ala Gln Met Gly Ser  
245 250 255  
Glu Phe Gly Asn Trp Ala Leu Gly Leu Trp Thr Glu Glu Gly Phe Asp  
260 265 270  
Ile Phe Glu Asp Phe Pro Asp Leu Asn Ser Val Leu Trp Gly Ala Glu  
275 280 285  
Glu Gly Lys Trp Val Pro Tyr Arg Val Pro Asn Asn Asn Leu Pro Ile  
290 295 300  
Pro Glu Arg Tyr Leu Ser Pro Asp Ala Thr Val Ser Thr Glu Val Arg  
305 310 315 320  
Ala Ile Ile Ala Trp Met Glu Lys Asn Pro Phe Val Leu Gly Ala Asn  
325 330 335  
Leu Asn Gly Gly Glu Arg Leu Val Ser Tyr Pro Tyr Asp Met Ala Arg  
340 345 350  
Thr Pro Thr Gln Glu Gln Leu Leu Ala Ala Ala Met Ala Ala Ala Arg  
355 360 365  
Gly Glu Asp Glu Asp Glu Val Ser Glu Ala Gln Glu Thr Pro Asp His  
370 375 380  
Ala Ile Phe Arg Trp Leu Ala Ile Ser Phe Ala Ser Ala His Leu Thr  
385 390 395 400  
Leu Thr Glu Pro Tyr Arg Gly Gly Cys Gln Ala Gln Asp Tyr Thr Gly  
405 410 415  
Gly Met Gly Ile Val Asn Gly Ala Lys Trp Asn Pro Arg Thr Gly Thr  
420 425 430  
Ile Asn Asp Phe Ser Tyr Leu His Thr Asn Cys Leu Glu Leu Ser Phe  
435 440 445

Tyr Leu Gly Cys Asp Lys Phe Pro His Glu Gly Glu Leu Pro Arg Glu  
450 455 460

Trp Glu Asn Asn Lys Glu Ala Leu Leu Thr Phe Met Glu Gln Val His  
465 470 475 480

Arg Gly Ile Lys Gly Val Val Thr Asp Glu Gln Gly Ile Pro Ile Ala  
485 490 495

Asn Ala Thr Ile Ser Val Ser Gly Ile Asn His Gly Val Lys Thr Ala  
500 505 510

Ser Gly Gly Asp Tyr Trp Arg Ile Leu Asn Pro Gly Glu Tyr Arg Val  
515 520 525

Thr Ala His Ala Glu Gly Tyr Thr Pro Ser Ala Lys Thr Cys Asn Val  
530 535 540

Asp Tyr Asp Ile Gly Ala Thr Gln Cys Asn Phe Ile Leu Ala Arg Ser  
545 550 555 560

Asn Trp Lys Arg Ile Arg Glu Ile Met Ala Met Asn Gly Asn Arg Pro  
565 570 575

Ile Pro His Ile Asp Pro Ser Arg Pro Met Thr Pro Gln Gln Arg Arg  
580 585 590

Leu Gln Gln Arg Arg Leu Gln His Arg Leu Arg Leu Arg Ala Gln Met  
595 600 605

Arg Leu Arg Arg Leu Asn Ala Thr Thr Thr Leu Gly Pro His Thr Val  
610 615 620

Pro Pro Thr Leu Pro Pro Ala Pro Ala Thr Thr Leu Ser Thr Thr Ile  
625 630 635 640

Glu Pro Trp Gly Leu Ile Pro Pro Thr Thr Ala Gly Trp Glu Glu Ser  
645 650 655

Glu Thr Glu Thr Tyr Thr Glu Val Val Thr Glu Phe Gly Thr Glu Val  
660 665 670

Glu Pro Glu Phe Gly Thr Lys Val Glu Pro Glu Phe Glu Thr Gln Leu

675                      680                      685  
 Glu Pro Glu Phe Glu Thr Gln Leu Glu Pro Glu Phe Glu Glu Glu Glu  
 690                      695                      700  
 Glu Glu Glu Lys Glu Glu Glu Ile Ala Thr Gly Gln Ala Phe Pro Phe  
 705                      710                      715                      720  
 Thr Thr Val Glu Thr Tyr Thr Val Asn Phe Gly Asp Phe  
 725                      730

<210> 2838

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2838

Met Asp Pro Lys Asp Arg Lys Lys Ile Gln Phe Ser Val Pro Ala Pro  
 1                      5                      10                      15  
 Pro Ser Gln Leu Asp Pro Arg Gln Val Glu Met Ile Arg Arg Arg Arg  
 20                      25                      30  
 Pro Thr Pro Ala Met Leu Phe Arg Leu Ser Glu His Ser Ser Pro Glu  
 35                      40                      45  
 Glu Glu Ala Ser Pro His Gln Arg Ala Ser Gly Glu Gly His His Leu  
 50                      55                      60  
 Lys Ser Lys Arg Pro Asn Pro Cys Ala Tyr Thr Pro Pro Ser Leu Lys  
 65                      70                      75                      80  
 Ala Val Gln Arg Ile Ala Glu Ser His Leu Gln Ser Ile Ser Asn Leu  
 85                      90                      95  
 Asn Glu Asn Gln Ala Ser Glu Glu Glu Asp Glu Leu Gly Glu Leu Arg  
 100                      105                      110

Glu Leu Gly Tyr Pro Arg Glu Glu Asp Glu Glu Glu Glu Glu Asp Asp

115

120

125

Glu Glu Glu Glu Glu Glu Glu Asp Ser Gln Ala Glu Val Leu Lys Val

130

135

140

Ile Arg Gln Ser Ala Gly Gln Lys Thr Thr Cys Gly Gln Gly Leu Glu

145

150

155

160

Gly Pro Trp Glu Arg Pro Pro Pro Leu Asp Glu Ser Glu Arg Asp Gly

165

170

175

Gly Ser Glu Asp Gln Val Glu Asp Pro Ala Leu Ser Glu Pro Gly Glu

180

185

190

Glu Pro Gln Arg Pro Ser Pro Ser Glu Pro Gly Thr

195

200

<210> 2839

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2839

Met Ala Gln Glu Lys Asp Cys Gln Gly Ile Ile Glu Asp Val Ile Leu

1

5

10

15

Leu Gly Ala Pro Val Glu Gly Glu Ala Lys His Trp Glu Pro Phe Arg

20

25

30

Lys Val Val Ser Gly Arg Ile Ile Asn Gly Tyr Cys Arg Gly Asp Trp

35

40

45

Leu Leu Ser Phe Val Tyr Arg Thr Ser Ser Val Gln Leu Arg Val Ala

50

55

60

Gly Leu Gln Pro Val Leu Leu Gln Asp Arg Arg Val Glu Asn Val Asp



65                      70                      75                      80  
 Leu Thr Ser Val Val Ser Gly His Leu Asp Tyr Ala Lys Gln Met Asp  
                                  85                      90                      95  
 Ala Ile Leu Lys Ala Val Gly Ile Arg Thr Lys Pro Gly Trp Asp Glu  
                                  100                      105                      110  
 Lys Gly Leu Leu Leu Ala Pro Gly Cys Leu Pro Ser Glu Glu Pro Arg  
                                  115                      120                      125  
 Gln Ala Ala Ala Ala Ala Ser Ser Gly Glu Thr Pro His Gln Val Gly  
                                  130                      135                      140  
 Gln Thr Gln Gly Pro Ile Ser Gly Asp Thr Ser Lys Leu Ala Met Ser  
 145                      150                      155                      160  
 Thr Asp Pro Ser Gln Ala Gln Val Pro Val Gly Leu Asp Gln Ser Glu  
                                  165                      170                      175  
 Gly Ala Ser Leu Pro Ala Ala Ala Ser Pro Glu Arg Pro Pro Ile Cys  
                                  180                      185                      190  
 Ser His Gly Met Asp Pro Asn Pro Leu Gly Cys Pro Asp Cys Ala Cys  
                                  195                      200                      205  
 Lys Thr Gln Gly Pro Ser Thr Gly Leu Asp  
                                  210                      215

&lt;210&gt; 2840

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2840

Met Ala Phe Pro Cys Arg Arg Ser Leu Thr Ala Lys Thr Leu Ala Cys  
 1                      5                      10                      15

Leu Leu Val Gly Val Ser Phe Leu Val Leu Gln Arg Arg Arg Leu Pro  
 20 25 30  
 Pro Val Arg Pro His Gly Pro Gly Pro Ala Arg Gly Arg Pro Pro His  
 35 40 45  
 Pro Ala Leu Pro His Arg Arg Arg Leu His Gly Arg Pro Val Arg Arg  
 50 55 60  
 Leu Phe Leu Leu Gly Thr Pro Gly Pro Glu Asp Glu Ala Arg Ala Glu  
 65 70 75 80  
 Arg Leu Ala Glu Leu Val Ala Leu Glu Ala Arg Glu His Gly Asp Val  
 85 90 95  
 Leu Gln Trp Ala Phe Ala Asp Thr Phe Leu Asn Leu Thr Leu Lys His  
 100 105 110  
 Leu His Leu Leu Asp Trp Leu Ala Ala Arg Cys Pro His Ala Arg Phe  
 115 120 125  
 Leu Leu Ser Gly Asp Asp Asp Val Phe Val His Thr Ala Asn Val Val  
 130 135 140  
 Arg Phe Leu Gln Ala Gln Pro Pro Gly Arg His Leu Phe Ser Gly Gln  
 145 150 155 160  
 Leu Met Glu Gly Ser Val Pro Ile Arg Asp Ser Trp Ser Lys Tyr Phe  
 165 170 175  
 Val Pro Pro Gln Leu Phe Pro Gly Ser Ala Tyr Pro Val Tyr Cys Ser  
 180 185 190  
 Gly Gly Gly Phe Leu Leu Ser Gly Leu Ala Pro Ser Gly His Glu Gly  
 195 200 205  
 Ile Arg Pro Phe Gly Val Gln Leu Pro Gly Ala Gln Gln Ser Ser Phe  
 210 215 220  
 Asp Pro Cys Met Tyr Arg Glu Leu Leu Leu Val His Arg Phe Ala Pro  
 225 230 235 240  
 Tyr Glu Met Leu Leu Met Trp Lys Ala Leu His Ser Pro Ala Leu Ser

245 250 255  
Cys Asp Arg Gly His Arg Val Ser  
260

<210> 2841

<211> 222

<212> PRT

<213> Homo sapiens

<400> 2841

Met Asn Ser Thr Pro Arg Asn Ala Gln Ala Pro Ser His Arg Glu Cys  
1 5 10 15

Phe Leu Pro Ser Val Ala Arg Thr Pro Ser Val Thr Lys Val Thr Pro  
20 25 30

Ala Lys Lys Ile Thr Phe Leu Lys Arg Gly Asp Pro Arg Phe Ala Gly  
35 40 45

Val Arg Leu Ala Val His Gln Arg Ala Phe Lys Thr Phe Ser Ala Leu  
50 55 60

Met Asp Glu Leu Ser Gln Arg Val Pro Leu Ser Phe Gly Val Arg Ser  
65 70 75 80

Val Thr Thr Pro Arg Gly Leu His Ser Leu Ser Ala Leu Glu Gln Leu  
85 90 95

Glu Asp Gly Gly Cys Tyr Leu Cys Ser Asp Lys Lys Pro Pro Lys Thr  
100 105 110

Pro Ser Gly Pro Gly Arg Pro Gln Glu Arg Asn Pro Thr Ala Gln Gln  
115 120 125

Leu Arg Asp Val Glu Gly Gln Arg Glu Ala Pro Gly Thr Ser Ser Ser  
130 135 140

Arg Lys Ser Leu Lys Thr Pro Arg Arg Ile Leu Leu Ile Lys Asn Met  
 145                      150                      155                      160  
 Asp Pro Arg Leu Gln Gln Thr Val Val Leu Ser His Arg Asn Thr Arg  
                          165                      170                      175  
 Asn Leu Ala Ala Phe Leu Gly Lys Ala Ser Asp Leu Leu Arg Phe Pro  
                          180                      185                      190  
 Val Lys Gln Leu Tyr Thr Thr Ser Gly Lys Lys Val Leu Pro Asp Met  
                          195                      200                      205  
 Lys Phe His Gln Arg Ser Ala Glu Trp Arg Met Glu Val Asp  
                          210                      215                      220

<210> 2842

<211> 224

<212> PRT

<213> Homo sapiens

<400> 2842

Met Arg Val Ser Gly Val Leu Arg Leu Leu Ala Leu Ile Phe Ala Ile  
 1                      5                      10                      15  
 Val Thr Thr Trp Met Phe Ile Arg Ser Tyr Met Ser Phe Ser Met Lys  
                          20                      25                      30  
 Thr Ile Arg Leu Pro Arg Trp Leu Ala Ala Ser Pro Thr Lys Glu Ile  
                          35                      40                      45  
 Gln Val Lys Lys Tyr Lys Cys Gly Leu Ile Lys Pro Cys Pro Ala Asn  
                          50                      55                      60  
 Tyr Phe Ala Phe Lys Ile Cys Ser Gly Ala Ala Asn Val Val Gly Pro  
 65                      70                      75                      80  
 Thr Met Cys Phe Glu Asp Arg Met Ile Met Ser Pro Val Lys Asn Asn

	85	90	95
Val Gly Arg Gly Leu Asn Ile Ala Leu Val Asn Gly Thr Thr Gly Ala			
100	105	110	
Val Leu Gly Gln Lys Ala Phe Asp Met Tyr Ser Gly Asp Val Met His			
115	120	125	
Leu Val Lys Phe Leu Lys Glu Ile Pro Gly Gly Ala Leu Val Leu Val			
130	135	140	
Ala Ser Tyr Asp Asp Pro Gly Thr Lys Met Asn Asp Glu Ser Arg Lys			
145	150	155	160
Leu Phe Ser Asp Leu Gly Ser Ser Tyr Ala Lys Gln Leu Gly Phe Arg			
165	170	175	
Asp Ser Trp Val Phe Ile Gly Ala Lys Asp Leu Arg Gly Lys Ser Pro			
180	185	190	
Phe Glu Gln Phe Leu Lys Asn Ser Pro Asp Thr Asn Lys Tyr Glu Gly			
195	200	205	
Trp Pro Glu Leu Leu Glu Met Glu Gly Cys Met Pro Pro Lys Pro Phe			
210	215	220	

&lt;210&gt; 2843

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2843

Met Tyr Phe Ile Asn Gln Arg Leu Phe Leu Arg Leu Trp Arg Val Pro			
1	5	10	15
Val Met Arg Ala Ser His Cys Tyr Gln Ser Gln Gly Trp Arg Pro Val			
20	25	30	

Ala Val Gly Gln Asp Leu Thr Val Met Ala Ala Leu Gly Leu Gly Phe  
 35 40 45  
 Leu Thr Ser Asn Phe Arg Arg His Ser Trp Ser Ser Val Ala Phe Asn  
 50 55 60  
 Leu Phe Met Leu Ala Leu Gly Val Gln Trp Ala Ile Leu Leu Asp Gly  
 65 70 75 80  
 Phe Leu Ser Gln Phe Pro Pro Gly Lys Val Val Ile Thr Leu Phe Ser  
 85 90 95  
 Ile Arg Leu Ala Thr Met Ser Ala Met Ser Val Leu Ile Ser Ala Gly  
 100 105 110  
 Ala Val Leu Gly Lys Val Asn Leu Ala Gln Leu Val Val Met Ala Leu  
 115 120 125  
 Val Glu Val Thr Ala Leu Gly Thr Leu Arg Met Val Ile Ser Asn Ile  
 130 135 140  
 Phe Asn Thr Asp Tyr His Met Asn Leu Arg His Phe Tyr Val Phe Ala  
 145 150 155 160  
 Ala Tyr Phe Gly Leu Thr Val Ala Trp Cys Leu Pro Lys Pro Leu Pro  
 165 170 175  
 Lys Gly Thr Glu Asp Asn Asp Gln Arg Ala Thr Ile Pro Ser Leu Ser  
 180 185 190  
 Ala Met Leu Gly Ala Leu Phe Leu Trp Met Phe Trp Pro Ser Val Asn  
 195 200 205  
 Ser Pro Leu Leu Arg Ser Pro Ile Gln Arg Lys Asn Ala Met Phe Asn  
 210 215 220  
 Thr Tyr Tyr Ala Leu Ala Val Ser Val Val Thr Ala Ile Ser Gly Ser  
 225 230 235 240  
 Ser Leu Ala His Pro Gln Gly Lys Ile Ser Met Thr Tyr Val His Ser  
 245 250 255  
 Ala Val Leu Ala Gly Gly Val Ala Val Gly Thr Ser Cys His Leu Ile

260	265	270
Pro Ser Pro Trp Leu Ala Met Val Leu Gly Leu Val Ala Gly Leu Ile		
275	280	285
Ser Ile Gly Gly Ala Lys Cys Leu Pro Val Cys Cys Asn Arg Val Leu		
290	295	300
Gly Ile His His Ile Ser Val Met His Ser Ile Phe Ser Leu Leu Gly		
305	310	315
Leu Leu Gly Glu Ile Thr Tyr Ile Val Leu Leu Val Leu His Thr Val		
325	330	335
Trp Asn Gly Asn Gly Met Ile Gly Phe Gln Val Leu Leu Ser Ile Gly		
340	345	350
Glu Leu Ser Leu Ala Ile Val Ile Ala Leu Thr Ser Gly Leu Leu Thr		
355	360	365
Gly Leu Leu Leu Asn Leu Lys Ile Trp Lys Ala Pro His Val Ala Lys		
370	375	380
Tyr Phe Asp Asp Gln Val Phe Trp Lys Phe Pro His Leu Ala Val Gly		
385	390	395
Phe		400

&lt;210&gt; 2844

&lt;211&gt; 589

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2844

Met Gly Gln Thr Lys Ser Thr Ser Ser Gly Gly Gly Asn Arg Lys Cys

1

5

10

15

Asn Gln Glu Gln Ser Lys Asn Gln Pro Leu Asp Ala Arg Val Asp Lys  
 20 25 30  
 Ile Lys Asp Lys Lys Pro Arg Lys Lys Ala Met Glu Ser Ser Ser Asn  
 35 40 45  
 Ser Asp Ser Asp Ser Gly Thr Ser Ser Asp Thr Ser Ser Glu Gly Ile  
 50 55 60  
 Ser Ser Ser Asp Ser Asp Asp Leu Glu Glu Asp Glu Glu Glu Glu Asp  
 65 70 75 80  
 Gln Ser Ile Glu Glu Ser Glu Asp Asp Asp Ser Asp Ser Glu Ser Glu  
 85 90 95  
 Ala Gln His Lys Ser Asn Asn Gln Val Leu Leu His Gly Ile Ser Asp  
 100 105 110  
 Pro Lys Ala Asp Gly Gln Lys Ala Thr Glu Lys Ala Gln Glu Lys Arg  
 115 120 125  
 Ile His Gln Pro Leu Pro Leu Ala Ser Glu Ser Gln Thr His Ser Phe  
 130 135 140  
 Gln Ser Gln Gln Lys Gln Pro Gln Val Leu Ser Gln Gln Leu Pro Phe  
 145 150 155 160  
 Ile Phe Gln Ser Ser Gln Ala Lys Glu Glu Ser Val Asn Lys His Thr  
 165 170 175  
 Ser Val Ile Gln Ser Thr Gly Leu Val Ser Asn Val Lys Pro Leu Ser  
 180 185 190  
 Leu Val Asn Gln Ala Lys Lys Glu Thr Tyr Met Lys Leu Ile Val Pro  
 195 200 205  
 Ser Pro Asp Val Leu Lys Ala Gly Asn Lys Asn Thr Ser Glu Glu Ser  
 210 215 220  
 Ser Leu Leu Thr Ser Glu Leu Arg Ser Lys Arg Glu Gln Tyr Lys Gln  
 225 230 235 240  
 Ala Phe Pro Ser Gln Leu Lys Lys Gln Glu Ser Ser Lys Ser Leu Lys



	245		250		255
Lys Val Ile Ala Ala Leu Ser Asn Pro Lys Ala Thr Ser Ser Ser Pro					
	260		265		270
Ala His Pro Lys Gln Thr Leu Glu Asn Asn His Pro Asn Pro Phe Leu					
	275		280		285
Thr Asn Ala Leu Leu Gly Asn His Gln Pro Asn Gly Val Ile Gln Ser					
	290		295		300
Val Ile Gln Glu Ala Pro Leu Ala Leu Thr Thr Lys Thr Lys Met Gln					
305		310		315	320
Ser Lys Ile Asn Glu Asn Ile Ala Ala Ala Ser Gly Thr Pro Phe Ser					
	325		330		335
Ser Pro Val Asn Leu Ser Thr Ser Gly Arg Arg Thr Pro Gly Asn Gln					
	340		345		350
Thr Pro Val Met Pro Ser Ala Ser Pro Ile Leu His Ser Gln Gly Lys					
	355		360		365
Glu Lys Ala Val Ser Asn Asn Val Asn Pro Val Lys Thr Gln His His					
	370		375		380
Ser His Pro Ala Lys Ser Leu Val Glu Gln Phe Arg Gly Thr Asp Ser					
385		390		395	400
Asp Ile Pro Ser Ser Lys Asp Ser Glu Asp Ser Asn Glu Asp Glu Glu					
	405		410		415
Glu Asp Asp Glu Glu Glu Asp Glu Glu Asp Asp Glu Asp Asp Glu Ser					
	420		425		430
Asp Asp Ser Gln Ser Glu Ser Asp Ser Asn Ser Glu Ser Asp Thr Glu					
	435		440		445
Gly Ser Glu Glu Glu Asp Asp Asp Asp Lys Asp Gln Asp Glu Ser Asp					
	450		455		460
Ser Asp Thr Glu Gly Glu Lys Thr Ser Met Lys Leu Asn Lys Thr Thr					
465		470		475	480

Ser Ser Val Lys Ser Pro Ser Met Ser Leu Thr Gly His Ser Thr Pro

485

490

495

Arg Asn Leu His Ile Ala Lys Ala Pro Gly Ser Ala Pro Ala Ala Leu

500

505

510

Cys Ser Glu Ser Gln Ser Pro Ala Phe Leu Gly Thr Ser Ser Ser Thr

515

520

525

Leu Thr Ser Ser Pro His Ser Gly Thr Ser Lys Arg Arg Arg Val Thr

530

535

540

Asp Glu Arg Glu Leu Arg Ile Pro Leu Glu Tyr Gly Trp Gln Arg Glu

545

550

555

560

Thr Arg Ile Arg Asn Phe Gly Gly Arg Leu Gln Gly Glu Val Ala Phe

565

570

575

Met Leu His Val Glu Arg Asn Leu Gly Ser Thr Leu Lys

580

585

<210> 2845

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2845

Met Ala Ser Val Leu Asn Val Lys Glu Ser Lys Ala Pro Glu Arg Thr

1

5

10

15

Val Val Val Ala Gly Leu Pro Val Asp Leu Phe Ser Asp Gln Leu Leu

20

25

30

Ala Val Leu Val Lys Ser His Phe Gln Asp Ile Lys Asn Glu Gly Gly

35

40

45

Asp Val Glu Asp Val Ile Tyr Pro Thr Arg Thr Lys Gly Val Ala Tyr

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Leu Lys Leu Arg Lys Glu Thr Phe Ile Leu Glu Gly Lys Glu Asn Arg  
 290 295 300  
 Glu Lys Arg Met Ile Lys Arg Ala Cys Glu Gln Leu Ser Ser Arg Tyr  
 305 310 315 320  
 Leu Glu Val Leu Ile Asn Leu Tyr Arg Thr His Ile Asp Ile Ile Gly  
 325 330 335  
 Ser Ser Ser Asp Thr Tyr Leu Phe Lys Lys Gly Val Met Lys Leu Ile  
 340 345 350  
 Gly Gln Lys Val Ser  
 355

<210> 2846

<211> 550

<212> PRT

<213> Homo sapiens

<400> 2846

Met Glu Ser Leu Arg Asn Asp Gln Val Leu Gln Gly Phe Ser Val Asp  
 1 5 10 15  
 Lys Gly Glu Phe Thr Cys Pro Leu Cys Arg Gln Phe Ala Asn Ser Val  
 20 25 30  
 Leu Pro Cys Tyr Pro Gly Ser Asn Val Glu Asn Asn Pro Trp Gln Arg  
 35 40 45  
 Pro Ser Asn Lys Ser Ile Gln Asp Leu Ile Lys Glu Val Glu Glu Leu  
 50 55 60  
 Gln Gly Arg Pro Gly Ala Phe Pro Ser Glu Thr Asn Leu Ser Lys Glu  
 65 70 75 80  
 Met Glu Ser Val Met Lys Asp Ile Lys Asn Thr Thr Gln Lys Lys Tyr

	85	90	95
Arg Asp Tyr Ser Lys Thr Pro Gly Ser Pro Asp Asn Asp Phe Leu Phe			
100	105	110	
Met Tyr Ser Val Ala Arg Thr Asn Leu Glu Leu Glu Leu Ile His Arg			
115	120	125	
Gly Gly Asn Leu Cys Ser Gly Gly Ala Ser Thr Ala Gly Lys Arg Ser			
130	135	140	
Cys Leu Asn Gln Leu Phe His Val Leu Ala Leu His Met Arg Leu Tyr			
145	150	155	160
Ser Ile Asp Ser Glu Tyr Asn Pro Trp Arg Lys Leu Thr Gln Leu Glu			
165	170	175	
Glu Met Asn Pro Gln Leu Gly Tyr Glu Glu Gln Gln Pro Glu Val Pro			
180	185	190	
Ile Leu Tyr His Asp Val Thr Ser Leu Leu Leu Ile Gln Ile Leu Met			
195	200	205	
Met Pro Gln Pro Leu Arg Lys Asp His Phe Thr Cys Ile Val Lys Val			
210	215	220	
Leu Phe Thr Leu Leu Tyr Thr Gln Ala Leu Ala Ala Leu Ser Val Lys			
225	230	235	240
Cys Ser Glu Glu Asp Arg Ser Ala Trp Lys His Ala Gly Ala Leu Lys			
245	250	255	
Lys Ser Thr Cys Asp Ala Glu Lys Ser Tyr Glu Val Leu Leu Ser Phe			
260	265	270	
Val Ile Ser Glu Leu Phe Lys Gly Lys Leu Tyr His Glu Glu Gly Thr			
275	280	285	
Gln Glu Cys Ala Met Val Asn Pro Ile Ala Trp Ser Pro Glu Ser Met			
290	295	300	
Glu Lys Cys Leu Gln Asp Phe Cys Leu Pro Phe Leu Arg Ile Thr Ser			
305	310	315	320

Leu Leu Gln His His Leu Phe Gly Glu Asp Leu Pro Ser Cys Gln Glu  
325 330 335  
Glu Glu Glu Phe Ser Val Leu Ala Ser Cys Leu Gly Leu Leu Pro Thr  
340 345 350  
Phe Tyr Gln Thr Glu His Pro Phe Ile Ser Ala Ser Cys Leu Asp Trp  
355 360 365  
Pro Val Pro Ala Phe Asp Ile Ile Thr Gln Trp Cys Phe Glu Ile Lys  
370 375 380  
Ser Phe Thr Glu Arg His Ala Glu Gln Gly Lys Ala Leu Leu Ile Gln  
385 390 395 400  
Glu Ser Lys Trp Lys Leu Pro His Leu Leu Gln Leu Pro Glu Asn Tyr  
405 410 415  
Asn Thr Ile Phe Gln Tyr Tyr His Arg Lys Thr Cys Ser Val Cys Thr  
420 425 430  
Lys Val Pro Lys Asp Pro Ala Val Cys Leu Val Cys Gly Thr Phe Val  
435 440 445  
Cys Leu Lys Gly Phe Cys Cys Lys Gln Gln Ser Tyr Cys Glu Cys Val  
450 455 460  
Leu His Ser Gln Asn Cys Gly Ala Gly Thr Gly Ile Phe Leu Leu Ile  
465 470 475 480  
Asn Ala Ser Val Ile Ile Ile Ile Arg Gly His Arg Phe Cys Leu Trp  
485 490 495  
Gly Ser Val Tyr Leu Asp Ala His Gly Glu Glu Asp Arg Asp Leu Arg  
500 505 510  
Arg Gly Lys Pro Leu Tyr Ile Cys Lys Glu Arg Tyr Lys Val Leu Glu  
515 520 525  
Gln Gln Trp Ile Ser His Thr Phe Asp His Ile Asn Lys Arg Trp Gly  
530 535 540  
Pro His Tyr Asn Gly Leu

545

550

&lt;210&gt; 2847

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2847

Met Ser Trp Met Phe Leu Arg Asp Leu Leu Ser Gly Val Asn Lys Tyr

1

5

10

15

Ser Thr Gly Thr Gly Trp Ile Trp Leu Ala Val Val Phe Val Phe Arg

20

25

30

Leu Leu Val Tyr Met Val Ala Ala Glu His Val Trp Lys Asp Glu Gln

35

40

45

Lys Glu Phe Glu Cys Asn Ser Arg Gln Pro Gly Cys Lys Asn Val Cys

50

55

60

Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala Leu Gln

65

70

75

80

Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His Val Ala

85

90

95

Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr Val Ser

100

105

110

Pro Gly Thr Met Asp Gly Gly Leu Trp Tyr Ala Tyr Leu Ile Ser Leu

115

120

125

Ile Val Lys Thr Gly Phe Glu Ile Gly Phe Leu Val Leu Phe Tyr Lys

130

135

140

Leu Tyr Asp Gly Phe Ser Val Pro Tyr Leu Ile Lys Cys Asp Leu Lys

145

150

155

160

Pro Cys Pro Asn Thr Val Asp Cys Phe Ile Ser Lys Pro Thr Glu Lys  
                                 165                                170                                175  
 Thr Ile Phe Ile Leu Phe Leu Val Ile Thr Ser Cys Leu Cys Ile Val  
                                 180                                185                                190  
 Leu Asn Phe Ile Glu Leu Ser Phe Leu Val Leu Lys Cys Phe Ile Lys  
                                 195                                200                                205  
 Cys Cys Leu Gln Lys Tyr Leu Lys Lys Pro Gln Val Leu Ser Val  
                                 210                                215                                220

<210> 2848

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2848

Met Arg Ser Phe Lys Ser Leu Ile Phe Ser Ser Arg Pro His Cys Leu  
       1                                5                                10                                15  
 Pro Gly Arg Asp Val Gly Thr Ser Cys Ser Cys Gln Ala Gly Asn Arg  
                                 20                                25                                30  
 Ser Leu Ser Met Ser Thr Gly Ser Ala Leu Thr Pro Arg Lys Asp Cys  
                                 35                                40                                45  
 Asp Lys His Gly Leu Thr Cys Gly Ser Thr Gln Pro Ala Val Ser Thr  
                                 50                                55                                60  
 Leu Leu Phe Ser Arg Met Gln His Leu Met Phe Cys Gln Glu Ala Val  
       65                                70                                75                                80  
 Glu Leu His Ile Glu Val Ala Ser Val Ser Ser His Ser Lys Met Glu  
                                 85                                90                                95  
 Ile Ser Leu Ser Leu Phe



100

&lt;210&gt; 2849

&lt;211&gt; 429

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2849

Met Val Asn Val Pro Tyr Thr Arg Pro Val Lys Phe Lys Ala Ala His

1 5 10 15

Gly Phe Lys Gly Pro Tyr Asp Phe Asp Gln Ile Lys Val Val Gln Asp

20 25 30

Leu Ser Gly Glu His Met Gly Ala Val Trp Thr Met Lys Phe Ser His

35 40 45

Cys Gly Arg Leu Leu Ala Ser Ala Gly Gln Asp Asn Val Val Arg Ile

50 55 60

Trp Ala Leu Lys Asn Ala Phe Asp Tyr Phe Asn Asn Met Arg Met Lys

65 70 75 80

Tyr Asn Thr Glu Gly Arg Val Ser Pro Ser Pro Ser Gln Glu Ser Leu

85 90 95

Ser Ser Ser Lys Ser Asp Thr Asp Thr Gly Val Cys Ser Gly Thr Asp

100 105 110

Glu Asp Pro Asp Asp Lys Asn Ala Pro Phe Arg Gln Arg Pro Phe Cys

115 120 125

Lys Tyr Lys Gly His Thr Ala Asp Leu Leu Asp Leu Ser Trp Ser Lys

130 135 140

Asn Tyr Phe Leu Leu Ser Ser Ser Met Asp Lys Thr Val Arg Leu Trp

145 150 155 160

His Ile Ser Arg Arg Glu Cys Leu Cys Cys Phe Gln His Ile Asp Phe  
165 170 175  
Val Thr Ala Ile Ala Phe His Pro Arg Asp Asp Arg Tyr Phe Leu Ser  
180 185 190  
Gly Ser Leu Asp Gly Lys Leu Arg Leu Trp Asn Ile Pro Asp Lys Lys  
195 200 205  
Val Ala Leu Trp Asn Glu Val Asp Gly Gln Thr Lys Leu Ile Thr Ala  
210 215 220  
Ala Asn Phe Cys Gln Asn Gly Lys Tyr Ala Val Ile Gly Thr Tyr Asp  
225 230 235 240  
Gly Arg Cys Ile Phe Tyr Asp Thr Glu His Leu Lys Tyr His Thr Gln  
245 250 255  
Ile His Val Arg Ser Thr Arg Gly Arg Asn Lys Val Gly Arg Lys Ile  
260 265 270  
Thr Gly Ile Glu Pro Leu Pro Gly Glu Asn Lys Ile Leu Val Thr Ser  
275 280 285  
Asn Asp Ser Arg Ile Arg Leu Tyr Asp Leu Arg Asp Leu Ser Leu Ser  
290 295 300  
Met Lys Tyr Lys Gly Tyr Val Asn Ser Ser Ser Gln Ile Lys Ala Ser  
305 310 315 320  
Phe Ser His Asp Phe Thr Tyr Leu Val Ser Gly Ser Glu Asp Lys Tyr  
325 330 335  
Val Tyr Ile Trp Ser Thr Tyr His Asp Leu Ser Lys Phe Thr Ser Val  
340 345 350  
Arg Arg Asp Arg Asn Asp Phe Trp Glu Gly Ile Lys Ala His Asn Ala  
355 360 365  
Val Val Thr Ser Ala Ile Phe Ala Pro Asn Pro Ser Leu Met Leu Ser  
370 375 380  
Leu Asp Val Gln Ser Glu Lys Ser Glu Gly Asn Glu Lys Ser Glu Asp

385                      390                      395                      400  
Ala Glu Val Leu Asp Ala Thr Pro Ser Gly Ala Val Ala His Ala Cys  
                         405                      410                      415  
Asn Pro Ser Thr Leu Gly Gly Arg Gly Arg Arg Ile Thr  
                         420                      425

<210> 2850

<211> 492

<212> PRT

<213> Homo sapiens

<400> 2850

Met Ala Thr Gly Gly Gly Thr Arg Ser Met Thr Ser Val Tyr Gly His  
1                      5                      10                      15  
Leu Leu Gly Leu Gln Lys Leu Asn Leu Leu Asp Cys Ala Ser Tyr Ile  
                         20                      25                      30  
Thr Gly Leu Ser Gly Ala Thr Trp Thr Met Ala Thr Leu Tyr Arg Asp  
                         35                      40                      45  
Pro Asp Trp Ser Ser Lys Asn Leu Glu Pro Ala Ile Phe Glu Ala Arg  
                         50                      55                      60  
Arg His Val Val Lys Asp Lys Leu Pro Ser Leu Phe Pro Asp Gln Leu  
65                      70                      75                      80  
Arg Lys Phe Gln Glu Glu Leu Arg Gln Arg Ser Gln Glu Gly Tyr Arg  
                         85                      90                      95  
Val Thr Phe Thr Asp Phe Trp Gly Leu Leu Ile Glu Thr Cys Leu Gly  
                         100                      105                      110  
Asp Glu Arg Asn Glu Cys Lys Leu Ser Asp Gln Arg Ala Pro Leu Ser  
                         115                      120                      125

Cys Gly Gln Asn Pro Leu Pro Ile Tyr Leu Thr Ile Asn Val Lys Asp  
 130 135 140  
 Asp Val Ser Asn Gln Asp Phe Arg Glu Trp Phe Glu Phe Ser Pro Tyr  
 145 150 155 160  
 Glu Val Gly Leu Gln Lys Tyr Gly Ala Phe Ile Pro Ser Glu Leu Phe  
 165 170 175  
 Gly Ser Glu Phe Phe Met Gly Arg Leu Val Lys Arg Ile Pro Glu Ser  
 180 185 190  
 Arg Ile Cys Tyr Met Leu Gly Leu Trp Ser Ser Ile Phe Ser Leu Asn  
 195 200 205  
 Leu Leu Asp Ala Trp Asn Leu Ser His Thr Ser Glu Glu Phe Phe His  
 210 215 220  
 Arg Trp Thr Arg Glu Lys Val Gln Asp Ile Glu Asp Glu Pro Ile Leu  
 225 230 235 240  
 Pro Glu Ile Pro Lys Cys Asp Ala Asn Ile Leu Glu Thr Thr Val Val  
 245 250 255  
 Ile Pro Gly Ser Trp Leu Ser Asn Ser Phe Arg Glu Ile Leu Thr His  
 260 265 270  
 Arg Ser Phe Val Ser Glu Phe His Asn Phe Leu Ser Gly Leu Gln Leu  
 275 280 285  
 His Thr Asn Tyr Leu Gln Asn Gly Gln Phe Ser Arg Trp Lys Asp Thr  
 290 295 300  
 Val Leu Asp Gly Phe Pro Asn Gln Leu Ala Glu Ser Ala Asn His Leu  
 305 310 315 320  
 Cys Leu Leu Asp Thr Ala Phe Phe Val Asn Ser Ser Tyr Pro Pro Leu  
 325 330 335  
 Leu Arg Pro Glu Arg Lys Ala Asp Leu Ile Ile His Leu Asn Tyr Cys  
 340 345 350  
 Ala Gly Ser Gln Thr Lys Pro Leu Lys Gln Thr Cys Glu Tyr Cys Thr

355                      360                      365  
 Val Gln Asn Ile Pro Phe Pro Lys Tyr Glu Leu Pro Asp Glu Asn Glu  
 370                      375                      380  
 Asn Leu Lys Glu Tyr Tyr Leu Met Glu Asn Pro Gln Glu Pro Asp Ala  
 385                      390                      395                      400  
 Pro Ile Val Thr Phe Phe Pro Leu Ile Asn Asp Thr Phe Arg Lys Tyr  
 405                      410                      415  
 Lys Ala Pro Gly Val Glu Arg Ser Pro Glu Glu Leu Glu Gln Gly Gln  
 420                      425                      430  
 Val Asp Ile Tyr Gly Pro Lys Thr Pro Tyr Ala Thr Lys Glu Leu Thr  
 435                      440                      445  
 Tyr Thr Glu Ala Thr Phe Asp Lys Leu Val Lys Leu Ser Glu Tyr Asn  
 450                      455                      460  
 Ile Leu Asn Asn Lys Asp Thr Leu Leu Gln Ala Leu Arg Leu Ala Val  
 465                      470                      475                      480  
 Glu Lys Lys Lys Arg Leu Lys Gly Gln Cys Pro Ser  
 485                      490

<210> 2851

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2851

Met Tyr Gln Leu His Ser Glu Ile Gln Glu Glu Lys Arg Gln Pro Cys  
 1                      5                      10                      15  
 Cys His Thr Asn Arg Cys Gly Gly Gly Trp Ser Leu Val Cys Thr Ala  
 20                      25                      30

Val Leu Val Ala Pro Val Glu Asp Arg Gln Gly Trp Gln His Ser Leu  
35 40 45  
Cys Cys His Thr Thr Gly Ile Cys Ser Pro Arg Thr Val Gly Ala Ser  
50 55 60  
Val Pro Ala Glu Ile Phe Leu Val Cys Gly Ser Glu Trp His Ser His  
65 70 75 80  
Ser Ile Leu Ala His Met Lys Leu Thr Glu Ala Leu Cys Ser Ser Phe  
85 90 95  
Arg Leu Leu Gly Met Glu Met Arg Met  
100 105

&lt;210&gt; 2852

&lt;211&gt; 765

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2852

Met Asp Pro Val Ala Thr His Ser Cys His Leu Leu Gln Gln Leu His  
1 5 10 15  
Glu Gln Arg Ile Gln Gly Leu Leu Cys Asp Cys Met Leu Val Val Lys  
20 25 30  
Gly Val Cys Phe Lys Ala His Lys Asn Val Leu Ala Ala Phe Ser Gln  
35 40 45  
Tyr Phe Arg Ser Leu Phe Gln Asn Ser Ser Ser Gln Lys Asn Asp Val  
50 55 60  
Phe His Leu Asp Val Lys Asn Val Ser Gly Ile Gly Gln Ile Leu Asp  
65 70 75 80  
Phe Met Tyr Thr Ser His Leu Asp Leu Asn Gln Asp Asn Ile Gln Val

	85	90	95
Met Leu Asp Thr Ala Gln Cys Leu Gln Val Gln Asn Val Leu Ser Leu			
100	105	110	
Cys His Thr Phe Leu Lys Ser Ala Thr Val Val Gln Pro Pro Gly Met			
115	120	125	
Pro Cys Asn Ser Thr Leu Ser Leu Gln Ser Thr Leu Thr Pro Asp Ala			
130	135	140	
Thr Cys Val Ile Ser Glu Asn Tyr Pro Pro His Leu Leu Gln Glu Cys			
145	150	155	160
Ser Ala Asp Ala Gln Gln Asn Lys Thr Leu Asp Glu Ser His Pro His			
165	170	175	
Ala Ser Pro Ser Val Asn Arg His His Ser Ala Gly Glu Ile Ser Lys			
180	185	190	
Gln Ala Pro Asp Thr Ser Asp Gly Ser Cys Thr Glu Leu Pro Phe Lys			
195	200	205	
Gln Pro Asn Tyr Tyr Tyr Lys Leu Arg Asn Phe Tyr Ser Lys Gln Tyr			
210	215	220	
His Lys His Ala Ala Gly Pro Ser Gln Glu Arg Val Val Glu Gln Pro			
225	230	235	240
Phe Ala Phe Ser Thr Ser Thr Asp Leu Thr Thr Val Glu Ser Gln Pro			
245	250	255	
Cys Ala Val Ser His Ser Glu Cys Ile Leu Glu Ser Pro Glu His Leu			
260	265	270	
Pro Ser Asn Phe Leu Ala Gln Pro Val Asn Asp Ser Ala Pro His Pro			
275	280	285	
Glu Ser Asp Ala Thr Cys Gln Gln Pro Val Lys Gln Met Arg Leu Lys			
290	295	300	
Lys Ala Ile His Leu Lys Lys Leu Asn Phe Leu Lys Ser Gln Lys Tyr			
305	310	315	320

Ala Glu Gln Val Ser Glu Pro Lys Ser Asp Asp Gly Leu Thr Lys Arg			
325	330	335	
Leu Glu Ser Ala Ser Lys Asn Thr Leu Glu Lys Ala Ser Ser Gln Ser			
340	345	350	
Ala Glu Glu Lys Glu Ser Glu Glu Val Val Ser Cys Glu Asn Phe Asn			
355	360	365	
Cys Ile Ser Glu Thr Glu Arg Pro Glu Asp Pro Ala Ala Leu Glu Asp			
370	375	380	
Gln Ser Gln Thr Leu Gln Ser Gln Arg Gln Tyr Ala Cys Glu Leu Cys			
385	390	395	400
Gly Lys Pro Phe Lys His Pro Ser Asn Leu Glu Leu His Lys Arg Ser			
405	410	415	
His Thr Gly Glu Lys Pro Phe Glu Cys Asn Ile Cys Gly Lys His Phe			
420	425	430	
Ser Gln Ala Gly Asn Leu Gln Thr His Leu Arg Arg His Ser Gly Glu			
435	440	445	
Glu Pro Tyr Ile Cys Glu Ile Cys Gly Lys Arg Phe Ala Ala Ser Gly			
450	455	460	
Asp Val Gln Arg His Ile Ile Ile His Ser Gly Glu Lys Pro His Leu			
465	470	475	480
Cys Asp Ile Cys Gly Arg Gly Phe Ser Asn Phe Ser Asn Leu Lys Glu			
485	490	495	
His Lys Lys Thr His Thr Ala Asp Lys Ile Phe Thr Cys Asp Glu Cys			
500	505	510	
Gly Lys Ser Phe Asn Met Gln Arg Lys Leu Val Lys His Arg Ile Arg			
515	520	525	
His Thr Gly Glu Arg Pro Tyr Ser Cys Ser Ala Cys Gly Lys Cys Phe			
530	535	540	
Gly Gly Ser Gly Asp Leu Arg Arg His Val Arg Thr His Thr Gly Glu			



545                      550                      555                      560  
Lys Pro Tyr Thr Cys Glu Ile Cys Asn Lys Cys Phe Thr Arg Ser Ala  
                         565                      570                      575  
Val Leu Arg Arg His Lys Lys Met His Cys Lys Ala Gly Asp Glu Ser  
                         580                      585                      590  
Pro Asp Val Leu Glu Glu Leu Ser Gln Ala Ile Glu Thr Ser Asp Leu  
                         595                      600                      605  
Glu Lys Ser Gln Ser Ser Asp Ser Phe Ser Gln Asp Thr Ser Val Thr  
                         610                      615                      620  
Leu Met Pro Val Ser Val Lys Leu Pro Val His Pro Val Glu Asn Ser  
625                      630                      635                      640  
Val Ala Glu Phe Asp Ser His Ser Gly Gly Ser Tyr Cys Lys Leu Arg  
                         645                      650                      655  
Ser Met Ile Gln Pro His Gly Val Ser Asp Gln Glu Lys Leu Ser Leu  
                         660                      665                      670  
Asp Pro Gly Lys Leu Ala Lys Pro Gln Met Gln Gln Thr Gln Pro Gln  
                         675                      680                      685  
Ala Tyr Ala Tyr Ser Asp Val Asp Thr Pro Ala Gly Gly Glu Pro Leu  
                         690                      695                      700  
Gln Ala Asp Gly Met Ala Met Ile Arg Ser Ser Leu Ala Ala Leu Asp  
705                      710                      715                      720  
Asn His Gly Gly Asp Pro Leu Gly Ser Arg Ala Ser Ser Thr Thr Tyr  
                         725                      730                      735  
Arg Asn Ser Glu Gly Gln Phe Phe Ser Ser Met Thr Leu Trp Gly Leu  
                         740                      745                      750  
Ala Met Lys Thr Leu Gln Asn Glu Asn Glu Leu Asp Gln  
                         755                      760                      765

&lt;210&gt; 2853

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2853

Met Ser Glu Asp Asn Arg Pro Leu Thr Gly Leu Ala Ala Ala Ile Ala

1 5 10 15

Gly Ala Lys Leu Arg Lys Val Ser Arg Met Glu Asp Thr Ser Phe Pro

20 25 30

Ser Gly Gly Asn Ala Ile Gly Val Asn Ser Ala Ser Ser Lys Thr Asp

35 40 45

Thr Gly Arg Gly Asn Gly Pro Leu Pro Leu Gly Gly Ser Gly Leu Met

50 55 60

Glu Glu Met Ser Ala Leu Leu Ala Arg Arg Arg Arg Ile Ala Glu Lys

65 70 75 80

Gly Ser Thr Ile Glu Thr Glu Gln Lys Glu Asp Lys Gly Glu Asp Ser

85 90 95

Glu Pro Val Thr Ser Lys Ala Ser Ser Thr Ser Thr Pro Glu Pro Thr

100 105 110

Arg Lys Pro Trp Glu Arg Thr Asn Thr Met Asn Gly Ser Lys Ser Pro

115 120 125

Val Ile Ser Arg Arg Asp Ser Pro Arg Lys Asn Gln Ile Val Phe Asp

130 135 140

Asn Arg Ser Tyr Asp Ser Leu His Arg Pro Lys Ser Thr Pro Leu Ser

145 150 155 160

Gln Pro Ser Ala Asn Gly Val Gln Thr Glu Gly Leu Asp Tyr Asp Arg

165 170 175

Leu Lys Gln Asp Ile Leu Asp Glu Met Arg Lys Glu Leu Thr Lys Leu

180 185 190  
Lys Glu Glu Leu Ile Asp Ala Ile Arg Gln Gly Leu Ser Lys Ser Asn  
195 200 205  
Thr Ala  
210

<210> 2854

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2854

Met Gln Gln Thr Lys Gln Gln Arg Glu Asn Ile Gln Gln Val Ser Gln  
1 5 10 15  
Lys Glu Ala Lys His Lys Ile Thr Ser Ala Asp Gly His Ile Glu Ser  
20 25 30  
Ser Ala Leu Leu Lys Glu Lys Gln Arg His Arg Leu His Lys Phe Leu  
35 40 45  
Cys Leu Arg Val Gly Lys Pro Met Arg Lys Thr Phe Val Ser Gln Ala  
50 55 60  
Ser Ala Thr Met Gln Gln Tyr Ala Gln Arg Asp Lys Lys His Glu Tyr  
65 70 75 80  
Trp Phe Ala Val Pro Gln Glu Arg Thr Asp His Leu Tyr Ala Phe Phe  
85 90 95  
Ile Gln Trp Ser Pro Glu Ile Tyr Ala Glu Asp Thr Gly Glu Tyr Thr  
100 105 110  
Arg Glu Pro Gly Phe Ile Val Val Lys Lys Ile Glu Glu Ser Glu Thr  
115 120 125

Ile Glu Asp Ser Ser Asn Gln Ala Ala Ala Arg Glu Trp Glu Leu Thr  
130 135 140  
Lys His Leu Pro Pro Arg Thr Ile Gly Tyr Pro Trp Thr Leu Val Tyr  
145 150 155 160  
Gly Thr Gly Lys His Gly Thr Ser Leu Lys Thr Leu Tyr Arg Thr Met  
165 170 175  
Thr Gly Leu Asp Thr Pro Val Leu Met Val Ile Lys Asp Ser Asp Gly  
180 185 190  
Gln Val Phe Gly Ala Leu Ala Ser Glu Pro Leu Lys Val Ser Asp Gly  
195 200 205  
Phe Tyr Gly Thr Gly Glu Thr Phe Val Phe Thr Phe Cys Pro Glu Phe  
210 215 220  
Glu Val Phe Lys Trp Thr Gly Asp Asn Met Phe Phe Ile Lys Gly Asp  
225 230 235 240  
Met Asp Ser Leu Ala Phe Gly Gly Gly Gly Gly Glu Phe Ala Leu Trp  
245 250 255  
Leu Asp Gly Asp Leu Tyr His Gly Arg Ser His Ser Cys Lys Thr Phe  
260 265 270  
Gly Asn Arg Thr Leu Ser Lys Lys Glu Asp Phe Phe Ile Gln Asp Ile  
275 280 285  
Glu Ile Trp Ala Phe Glu  
290

&lt;210&gt; 2855

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2855

Met Tyr Gln Pro Ser Arg Gly Ala Ala Arg Arg Leu Gly Pro Cys Leu  
1 5 10 15  
Arg Ala Tyr Gln Ala Arg Pro Gln Asp Gln Leu Tyr Pro Gly Thr Leu  
20 25 30  
Pro Phe Pro Pro Leu Trp Pro His Ser Thr Thr Thr Thr Ser Pro Ser  
35 40 45  
Ser Pro Leu Phe Trp Ser Pro Leu Pro Pro Arg Leu Pro Thr Gln Arg  
50 55 60  
Leu Pro Gln Val Pro Pro Leu Pro Leu Pro Gln Ile Gln Ala Leu Ser  
65 70 75 80  
Ser Ala Trp Val Val Leu Pro Pro Gly Lys Gly Glu Glu Gly Pro Gly  
85 90 95  
Pro Glu Leu His Ser Gly Cys Leu Asp Gly Leu Arg Ser Leu Phe Glu  
100 105 110  
Gly Pro Pro Cys Pro Tyr Pro Gly Ala Trp Ile Pro Phe Gln Val Pro  
115 120 125  
Gly Thr Ala His Pro Ser Pro Ala Thr Pro Ser Gly Asp Pro Ser Met  
130 135 140  
Glu Glu His Leu Ser Val Met Tyr Glu Arg Leu Arg Gln Glu Leu Pro  
145 150 155 160  
Lys Leu Phe Leu Gln Ser His Asp Tyr Ser Leu Tyr Ser Leu Asp Val  
165 170 175  
Glu Phe Ile Asn Glu Ile Leu Asn Ile Arg Ser Lys Gly Arg Thr Trp  
180 185 190  
Tyr Ile Leu Ser Leu Thr Leu Cys Arg Phe Leu Ala Trp Asn Tyr Phe  
195 200 205  
Ala His Leu Arg Leu Glu Val Leu Gln Leu Thr Arg His Pro Glu Asn  
210 215 220

Trp Thr Leu Gln Ala Arg Trp Arg Leu Val Gly Leu Pro Val His Leu  
 225                      230                      235                      240  
 Leu Phe Leu Arg Phe Tyr Lys Arg Asp Lys Asp Glu His Tyr Arg Thr  
                          245                      250                      255  
 Tyr Asp Ala Tyr Ser Thr Phe Tyr Leu Asn Ser Ser Gly Leu Ile Cys  
                          260                      265                      270  
 Arg His Arg Leu Asp Lys Leu Met Pro Ser Pro Ser Pro Pro Thr Pro  
                          275                      280                      285  
 Val Lys Lys Leu Leu Val Gly Ala Leu Val Ala Leu Gly Leu Ser Glu  
                          290                      295                      300  
 Pro Glu Pro Asp Leu Asn Leu Cys Ser Lys Pro  
 305                      310                      315

<210> 2856

<211> 575

<212> PRT

<213> Homo sapiens

<400> 2856

Met Ala Ala Arg Thr Leu Gly Arg Gly Val Gly Arg Leu Leu Gly Ser  
   1                      5                      10                      15  
 Leu Arg Gly Leu Ser Gly Gln Pro Ala Arg Pro Pro Cys Gly Val Ser  
                          20                      25                      30  
 Ala Pro Arg Arg Ala Ala Ser Gly Pro Ser Gly Ser Ala Pro Ala Val  
                          35                      40                      45  
 Ala Ala Ala Ala Ala Gln Pro Gly Ser Tyr Pro Ala Leu Ser Ala Gln  
                          50                      55                      60  
 Ala Ala Arg Glu Pro Ala Ala Phe Trp Gly Pro Leu Ala Arg Asp Thr

65	70	75	80
Leu Val Trp Asp Thr Pro Tyr His Thr Val Trp Asp Cys Asp Phe Ser			
	85	90	95
Thr Gly Lys Ile Gly Trp Phe Leu Gly Gly Gln Leu Asn Val Ser Val			
	100	105	110
Asn Cys Leu Asp Gln His Val Arg Lys Ser Pro Glu Ser Val Ala Leu			
	115	120	125
Ile Trp Glu Arg Asp Glu Pro Gly Thr Glu Val Arg Ile Thr Tyr Arg			
	130	135	140
Glu Leu Leu Glu Thr Thr Cys Arg Leu Ala Asn Thr Leu Lys Arg His			
	145	150	155
Gly Val His Arg Gly Asp Arg Val Ala Ile Tyr Met Pro Val Ser Pro			
	165	170	175
Leu Ala Val Ala Ala Met Leu Ala Cys Ala Arg Ile Gly Ala Val His			
	180	185	190
Thr Val Ile Phe Ala Gly Phe Ser Ala Glu Ser Leu Ala Gly Arg Ile			
	195	200	205
Asn Asp Ala Lys Cys Lys Val Val Ile Thr Phe Asn Gln Gly Leu Arg			
	210	215	220
Gly Gly Arg Val Val Glu Leu Lys Ile Ile Val Asp Glu Ala Val Lys			
	225	230	235
His Cys Pro Thr Val Gln His Val Leu Val Ala His Arg Thr Asp Asn			
	245	250	255
Lys Val His Met Gly Asp Leu Asp Val Pro Leu Glu Gln Glu Met Ala			
	260	265	270
Lys Glu Asp Pro Val Cys Ala Pro Glu Ser Met Gly Ser Glu Asp Met			
	275	280	285
Leu Phe Met Leu Tyr Thr Ser Gly Ser Thr Gly Met Pro Lys Gly Ile			
	290	295	300

Val His Thr Gln Ala Gly Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys  
305 310 315 320  
Leu Val Phe Asp His Gln Pro Gly Asp Ile Phe Gly Cys Val Ala Asp  
325 330 335  
Ile Gly Trp Ile Thr Gly His Ser Tyr Val Val Tyr Gly Pro Leu Cys  
340 345 350  
Asn Gly Ala Thr Ser Val Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn  
355 360 365  
Ala Gly Arg Tyr Trp Glu Thr Val Glu Arg Leu Lys Ile Asn Gln Phe  
370 375 380  
Tyr Gly Ala Pro Thr Ala Val Arg Leu Leu Leu Lys Tyr Gly Asp Ala  
385 390 395 400  
Trp Val Lys Lys Tyr Asp Arg Ser Ser Leu Arg Thr Leu Gly Ser Val  
405 410 415  
Gly Glu Pro Ile Asn Cys Glu Ala Trp Glu Trp Leu His Arg Val Val  
420 425 430  
Gly Asp Ser Arg Cys Thr Leu Val Asp Thr Trp Trp Gln Thr Glu Thr  
435 440 445  
Gly Gly Ile Cys Ile Ala Pro Arg Pro Ser Glu Glu Gly Ala Glu Ile  
450 455 460  
Leu Pro Ala Met Ala Met Arg Pro Phe Phe Gly Ile Val Pro Val Leu  
465 470 475 480  
Met Asp Glu Lys Gly Ser Val Val Glu Gly Ser Asn Val Ser Gly Ala  
485 490 495  
Leu Cys Ile Ser Gln Ala Trp Pro Gly Met Ala Arg Thr Ile Tyr Gly  
500 505 510  
Asp His Gln Arg Phe Val Asp Ala Tyr Phe Lys Ala Tyr Pro Gly Tyr  
515 520 525  
Tyr Phe Thr Gly Asp Gly Ala Tyr Arg Thr Glu Gly Gly Tyr Tyr Gln



530	535	540
Ile Thr Gly Arg Met Asp Asp Val Ile Asn Ile Leu Gln Ile Val Gly		
545	550	555
Phe Phe Arg Glu Ala Ile Arg Asn Ser Gly Asp Leu Leu Glu His		
565	570	575

&lt;210&gt; 2857

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2857

Met Asp Asp Ala Pro Leu Thr Ile Leu Leu Lys Ser Asn His Pro Tyr		
1	5	10
Pro Ala Gln Cys Gln Tyr Pro Ile Pro Gln His Ala Leu Lys Gly Leu		
20	25	30
Lys Pro Val Ile Thr Cys Leu Leu Gln His Gly Leu Leu Lys Pro Ile		
35	40	45
Asn Ser Pro Tyr Asn Ser Pro Ile Leu Pro Val Gln Lys Leu Asp Lys		
50	55	60
Ser His Arg Leu Val Gln Asp Leu Arg Leu Ser Thr Lys Leu Ser Cys		
65	70	75
Leu Ser Thr Pro Trp Cys Gln Ser His Ile Leu Ser Tyr Pro Gln Tyr		
85	90	95
Leu Pro Pro Gln Pro Leu His Asn Pro Leu Phe Cys Ser Gly Ser Gln		
100	105	110
Thr Cys Phe Leu Tyr Tyr Ser Leu His Pro Ser Ser Gln Pro Leu Phe		
115	120	125

Ala Phe Thr Trp Thr Asp Pro Asp Thr His Gln Ala Gln Gln Ile Thr  
 130 135 140  
 Trp Ala Val Leu Pro Gln Gly Phe Thr Asp Ser Pro His Tyr Phe Ser  
 145 150 155 160  
 Gln Ala Gln Ile Ser Ser Ser Ser Ile Thr Tyr Leu Asp Ile Val Leu  
 165 170 175  
 His Glu Asn Thr Arg Ala Leu Pro Ala Asp Cys Val Trp Leu Ile Ser  
 180 185 190  
 Gln Thr Pro Thr Pro Ser Thr Lys Gln Gln Leu Leu Ser Phe Leu Gly  
 195 200 205  
 Met Val Gly Tyr Phe His Leu  
 210 215

<210> 2858

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2858

Met Val Gly Lys Leu Leu Ser Tyr Met Ala Thr Ala Val Phe Cys Leu  
 1 5 10 15  
 Leu Val Cys Phe Cys Met Phe Val Cys Leu Glu Thr Val Cys Ser Val  
 20 25 30  
 Pro Gln Ala Gly Val Gln Trp Arg Asn Arg Gly Ser Leu Gln Pro Gln  
 35 40 45  
 Thr Pro Gly Ile Arg Arg Ser Ser His Leu Ser Phe Pro Arg Gly Trp  
 50 55 60  
 Asp Tyr Arg His Ile Pro Thr His Pro Val Asn Val Phe Asn Phe Phe

65                      70                      75                      80  
Leu Arg Gln Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr  
                         85                      90                      95  
Ile Ser Ala His Cys Lys Leu Arg Leu Pro Gly Ser Cys His Ser Pro  
                         100                      105                      110  
Ala Ser Ala Ser Gln Leu Ala Gly Thr Thr Gly Ala His His His Ala  
                         115                      120                      125  
Trp Leu Ile Phe Cys Ile Phe Ser Arg Asp Gly Asp Ser Pro Cys  
                         130                      135                      140

&lt;210&gt; 2859

&lt;211&gt; 425

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

Met Asp Asp Gly Thr Asn Glu Tyr Lys Ile Ile Met Leu Asn Arg Arg  
1                      5                      10                      15  
Tyr Leu Ser Phe Arg Val Ile Lys Val Asn Lys Glu Cys Val Arg Gly  
                         20                      25                      30  
Leu Trp Ala Gly Gln Gln Gln Glu Leu Val Phe Leu Arg Asn Arg Asn  
                         35                      40                      45  
Pro Glu Arg Gly Ser Ile Gln Asn Ala Lys Gln Ala Leu Arg Asn Met  
                         50                      55                      60  
Ile Asn Ser Ser Cys Asp Gln Pro Ile Gly Tyr Pro Ile Phe Val Ser  
65                      70                      75                      80  
Pro Leu Thr Thr Ser Tyr Ser Asp Ser His Glu Gln Leu Lys Asp Ile  
                         85                      90                      95

Leu Gly Gly Pro Ile Ser Leu Gly Asn Ile Arg Asn Phe Ile Val Ser  
100 105 110  
Thr Trp His Arg Leu Arg Lys Gly Cys Gly Ala Gly Cys Asn Ser Gly  
115 120 125  
Gly Asn Ile Glu Asp Ser Asp Thr Gly Gly Gly Thr Ser Cys Thr Gly  
130 135 140  
Asn Asn Ala Thr Thr Ala Asn Asn Pro His Ser Asn Val Thr Gln Gly  
145 150 155 160  
Ser Ile Gly Asn Pro Gly Gln Gly Ser Gly Thr Gly Leu His Pro Pro  
165 170 175  
Val Thr Ser Tyr Pro Pro Thr Leu Gly Thr Ser His Ser Ser His Ser  
180 185 190  
Val Gln Ser Gly Leu Val Arg Gln Ser Pro Ala Arg Ala Ser Val Ala  
195 200 205  
Ser Gln Ser Ser Tyr Cys Tyr Ser Ser Arg His Ser Ser Leu Arg Met  
210 215 220  
Ser Thr Thr Gly Phe Val Pro Cys Arg Arg Ser Ser Thr Ser Gln Ile  
225 230 235 240  
Ser Leu Arg Asn Leu Pro Ser Ser Ile Gln Ser Arg Leu Ser Met Val  
245 250 255  
Asn Gln Met Glu Pro Ser Gly Gln Ser Gly Leu Ala Cys Val Gln His  
260 265 270  
Gly Leu Pro Ser Ser Ser Ser Ser Ser Gln Ser Ile Pro Ala Cys Lys  
275 280 285  
His His Thr Leu Val Gly Phe Leu Ala Thr Glu Gly Gly Gln Ser Ser  
290 295 300  
Ala Thr Asp Ala Gln Pro Gly Asn Thr Leu Ser Pro Ala Asn Asn Ser  
305 310 315 320  
His Ser Arg Lys Ala Glu Val Ile Tyr Arg Val Gln Ile Val Asp Pro

	325		330		335										
Ser	Gln	Ile	Leu	Glu	Gly	Ile	Asn	Leu	Ser	Lys	Arg	Lys	Glu	Leu	Gln
	340		345		350										
Trp	Pro	Asp	Glu	Gly	Ile	Arg	Leu	Lys	Ala	Gly	Arg	Asn	Ser	Trp	Lys
	355		360		365										
Asp	Trp	Ser	Pro	Gln	Glu	Gly	Met	Glu	Gly	His	Val	Ile	His	Arg	Trp
	370		375		380										
Val	Pro	Cys	Ser	Arg	Asp	Pro	Gly	Thr	Arg	Ser	His	Ile	Asp	Lys	Ala
385			390		395									400	
Val	Leu	Leu	Val	Gln	Ile	Asp	Asp	Lys	Tyr	Val	Thr	Val	Ile	Glu	Thr
	405		410		415										
Gly	Val	Leu	Glu	Leu	Gly	Ala	Glu	Val							
	420		425												

&lt;210&gt; 2860

&lt;211&gt; 753

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2860

Met	Val	Val	Cys	Tyr	Thr	Gln	Gln	Gly	Thr	Ala	Thr	Gly	Thr	Val	Pro
1			5					10						15	
Thr	Ser	Val	Leu	Ser	Tyr	Ser	Asp	Tyr	Ile	Ser	Arg	Pro	Glu	Asp	His
			20					25						30	
Thr	Ser	Val	Val	Arg	Phe	Asp	Lys	Asp	Glu	Arg	Glu	Lys	Leu	Cys	Arg
			35					40						45	
Ile	Val	Ile	Ile	Asp	Asp	Ser	Leu	Tyr	Glu	Glu	Glu	Glu	Thr	Phe	His
			50				55						60		

Val Leu Leu Ser Met Pro Met Gly Gly Arg Ile Gly Ser Glu Phe Pro  
 65 70 75 80  
 Gly Ala Gln Val Thr Ile Val Pro Asp Lys Asp Asp Glu Pro Ile Phe  
 85 90 95  
 Tyr Phe Gly Asp Val Glu Tyr Ser Val Asp Glu Ser Ala Gly Tyr Val  
 100 105 110  
 Glu Val Gln Val Trp Arg Thr Gly Thr Asp Leu Ser Lys Ser Ser Ser  
 115 120 125  
 Val Thr Val Arg Ser Arg Lys Thr Asp Pro Pro Ser Ala Asp Ala Gly  
 130 135 140  
 Thr Asp Tyr Val Gly Ile Ser Arg Asn Leu Asp Phe Ala Pro Gly Val  
 145 150 155 160  
 Asn Met Gln Pro Val Arg Val Val Ile Leu Asp Asp Leu Gly Gln Pro  
 165 170 175  
 Ala Leu Glu Gly Ile Glu Lys Phe Glu Leu Val Leu Arg Met Pro Met  
 180 185 190  
 Asn Ala Ala Leu Gly Lys Pro Ser Lys Thr Thr Val Ser Ile Asn Asp  
 195 200 205  
 Ser Val Ser Asp Leu Pro Lys Met Gln Phe Lys Glu Arg Ile Tyr Thr  
 210 215 220  
 Gly Ser Glu Ser Asp Gly Gln Ile Val Thr Met Ile His Arg Thr Gly  
 225 230 235 240  
 Asp Val Gln Tyr Arg Ser Ser Val Arg Cys Tyr Thr Arg Gln Gly Ser  
 245 250 255  
 Ala Gln Val Met Met Asp Phe Glu Glu Arg Pro Asn Thr Asp Thr Ser  
 260 265 270  
 Ile Ile Thr Phe Leu Pro Gly Glu Thr Glu Lys Pro Cys Ile Leu Glu  
 275 280 285  
 Leu Met Asp Asp Val Leu Tyr Glu Glu Val Glu Glu Leu Arg Leu Val

290 295 300  
Leu Gly Thr Pro Gln Ser Asn Ser Pro Phe Gly Ala Ala Val Gly Glu  
305 310 315 320  
Gln Asn Glu Thr Leu Ile Arg Ile Arg Asp Asp Ala Asp Lys Thr Val  
325 330 335  
Ile Lys Phe Gly Glu Thr Lys Phe Ser Val Thr Glu Pro Lys Glu Pro  
340 345 350  
Gly Glu Ser Val Val Ile Arg Ile Pro Val Ile Arg Gln Gly Asp Thr  
355 360 365  
Ser Lys Val Ser Ile Val Arg Val His Thr Lys Asp Gly Ser Ala Thr  
370 375 380  
Ser Gly Glu Asp Tyr His Pro Val Ser Glu Glu Ile Glu Phe Lys Glu  
385 390 395 400  
Gly Glu Thr Gln His Val Val Glu Ile Glu Val Ile Phe Asp Gly Val  
405 410 415  
Arg Glu Met Arg Glu Ala Phe Thr Val His Leu Lys Pro Asp Glu Asn  
420 425 430  
Met Ile Ala Glu Met Gln Leu Thr Lys Ala Ile Val Tyr Ile Glu Glu  
435 440 445  
Met Ser Ser Met Ala Asp Val Thr Phe Pro Ser Val Pro Gln Ile Val  
450 455 460  
Ser Leu Leu Met Tyr Asp Asp Thr Ser Lys Ala Lys Glu Ser Ala Glu  
465 470 475 480  
Pro Met Ser Gly Tyr Pro Val Ile Cys Ile Thr Ala Cys Asn Pro Lys  
485 490 495  
Tyr Ser Asp Tyr Asp Lys Thr Gly Ser Ile Cys Ala Ser Glu Asn Ile  
500 505 510  
Asn Asp Thr Leu Thr Arg Tyr Arg Trp Leu Ile Ser Ala Pro Ala Gly  
515 520 525

Pro Asp Gly Val Thr Ser Pro Met Arg Glu Val Asp Phe Asp Thr Phe  
 530 535 540

Phe Thr Ser Ser Lys Met Val Thr Leu Asp Ser Ile Tyr Phe Gln Pro  
 545 550 555 560

Gly Ser Arg Val Gln Cys Ala Ala Arg Ala Val Asn Thr Asn Gly Asp  
 565 570 575

Glu Gly Leu Glu Leu Met Ser Pro Ile Val Thr Ile Ser Arg Glu Glu  
 580 585 590

Gly Pro Cys Gln Pro Arg Val Pro Gly Val Val Gly Ala Glu Pro Phe  
 595 600 605

Ser Ala Lys Leu Arg Tyr Thr Gly Pro Glu Asp Ala Asp Tyr Thr Asn  
 610 615 620

Leu Ile Lys Leu Thr Val Thr Met Pro His Ile Asp Gly Met Leu Pro  
 625 630 635 640

Val Ile Ser Thr Arg Glu Leu Ser Asn Phe Glu Leu Thr Leu Ser Pro  
 645 650 655

Asp Gly Thr Arg Val Gly Asn His Lys Cys Ser Asn Leu Leu Asp Tyr  
 660 665 670

Thr Glu Val Lys Thr His Tyr Gly Phe Leu Thr Asp Ala Thr Lys Asn  
 675 680 685

Pro Glu Ile Ile Gly Glu Thr Tyr Pro Tyr Gln Tyr Ser Leu Ser Ile  
 690 695 700

Arg Gly Ser Thr Thr Leu Arg Phe Tyr Arg Asn Leu Asn Leu Glu Ala  
 705 710 715 720

Cys Leu Trp Lys Phe Val Ser Tyr Tyr Asp Met Ser Glu Leu Leu Ala  
 725 730 735

Asp Cys Gly Gly Thr Ile Gly Thr Asp Gly Gln Val Gln Ile Tyr Asn  
 740 745 750

Ile



<210> 2861

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2861

Met Thr Asn Pro Trp Ala Leu Ala Leu Thr Pro Arg Arg Arg Trp Trp  
1 5 10 15  
Pro Arg Ala Arg Pro Ser Gly Gln Pro Arg Pro Ser Arg Gly Ser Ser  
20 25 30  
Leu Val Pro Ala Pro Trp Arg Val Arg Val Asp Arg Cys Leu Pro Phe  
35 40 45  
Arg Ala Val Leu Ile Ala Asn Ala Ala Gln Ser Val Val Ala Ser Arg  
50 55 60  
His Leu Ser Arg Ala Phe Thr Cys Val His Ser Phe Ala Leu Lys Asn  
65 70 75 80  
Ser Pro Arg Ser Thr His Arg Trp Pro Arg Arg Ser Pro Ser Ser His  
85 90 95  
Val Gly Pro Arg Gly Asp Leu Gly Gly Arg Glu Asp Gly Arg Gly Ala  
100 105 110  
Trp Arg Ser  
115

<210> 2862

<211> 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2862

Met	Arg	Ala	Pro	Pro	Phe	Ser	Gln	Ala	Ser	Lys	Pro	Asp	Met	Arg	Leu
1				5					10					15	
Thr	Gly	Ser	Leu	Leu	Cys	Ser	Gln	Phe	Cys	Leu	Cys	Met	Ala	Glu	Ala
			20					25					30		
Ile	Leu	Leu	Phe	Ser	Pro	Glu	His	Ser	Leu	Phe	Phe	Phe	Cys	Ser	Arg
			35					40					45		
Lys	Ala	Arg	Ile	Arg	Leu	His	Trp	Ala	Gly	Gln	Thr	Leu	Ala	Ile	Leu
		50				55					60				
Cys	Ala	Ala	Leu	Gly	Leu	Gly	Phe	Ile	Ile	Ser	Ser	Arg	Thr	Arg	Ser
		65				70				75				80	
Glu	Leu	Pro	His	Leu	Val	Ser	Trp	His	Ser	Trp	Val	Gly	Ala	Leu	Thr
				85				90						95	
Leu	Leu	Ala	Thr	Ala	Val	Gln	Ala	Leu	Cys	Gly	Leu	Cys	Leu	Leu	Cys
			100					105						110	
Pro	Arg	Ala	Ala	Arg	Val	Ser	Arg	Val	Ala	Arg	Leu	Lys	Leu	Tyr	His
			115					120						125	
Leu	Thr	Cys	Gly	Leu	Val	Val	Tyr	Leu	Met	Ala	Thr	Val	Thr	Val	Leu
		130					135						140		
Leu	Gly	Met	Tyr	Ser	Val	Trp	Phe	Gln	Ala	Gln	Ile	Lys	Gly	Ala	Ala
		145				150				155				160	
Trp	Tyr	Leu	Cys	Leu	Ala	Leu	Pro	Val	Tyr	Pro	Ala	Leu	Val	Ile	Met
				165					170					175	
His	Gln	Ile	Ser	Arg	Ser	Tyr	Leu	Pro	Arg	Lys	Lys	Met	Glu	Met	
				180					185					190	

&lt;210&gt; 2863

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

Met Glu Ser Cys Ser Val Ala Gln Ala Gly Met Gln Cys Asp Gln Gln

1 5 10 15

Glu Arg Pro Leu Thr His Val Leu Pro Cys Pro Glu Ser Ala Trp Cys

20 25 30

Arg Leu Arg Lys His Phe Ile His Ile Pro Phe Ser Phe Cys Phe Glu

35 40 45

Thr Glu Ser Cys Pro Ile Ala Arg Leu Glu Cys Gly Gly Thr Ile Ser

50 55 60

Pro Leu Gly Phe Lys Gln Phe Ser Cys Leu Ser Pro Pro Ser Ser Trp

65 70 75 80

Asp Tyr Lys Arg Ala Pro Pro Cys Pro Ala Asn Ser Leu His Leu Ser

85 90 95

Arg Asp Arg Val Ser Pro Arg Arg Pro Gly Trp Ser

100 105

&lt;210&gt; 2864

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2864

Met Arg Ile Arg Thr Cys Ser Phe Phe Ser Phe Phe Leu Phe Leu Leu  
 1 5 10 15  
 Glu Ile Gly Ser Arg Phe Val Ala Gln Ala Gly Val His Trp His Asp  
 20 25 30  
 His Gly Ser Leu Gln Pro Gln Ile Pro Gly Leu Arg Gln Ser Ser Arg  
 35 40 45  
 Leu Gly Leu Pro Ile Ser Trp Asp Cys Arg Ala Met Pro Ser Cys Pro  
 50 55 60  
 Ala Asn Leu Asn Ile Val Phe Arg Asp Gly Ala His Tyr Val Ala Gln  
 65 70 75 80  
 Ala Gly Leu Glu Phe Leu Val Ser Ser Asn Pro Pro Thr Ala Ala Phe  
 85 90 95  
 Gln Ser Ala Gly Arg Thr Gly Ala Ser His Cys Ala Gln Leu Ser Asp  
 100 105 110  
 Ala Glu Phe  
 115

<210> 2865

<211> 585

<212> PRT

<213> Homo sapiens

<400> 2865

Met Ser Ala Thr Ser Val Asp Gln Arg Pro Lys Gly Gln Gly Asn Lys  
 1 5 10 15  
 Val Ser Val Gln Asn Gly Ser Ile His Gln Lys Asp Ala Val Asn Asp  
 20 25 30  
 Asp Asp Phe Glu Pro Tyr Leu Ser Ser Gln Thr Asn Gln Ser Asn Ser

35	40	45
Tyr Pro Pro Met Ser Asp Pro Tyr Met Pro Ser Tyr Tyr Ala Pro Ser		
50	55	60
Ile Gly Phe Pro Tyr Ser Leu Gly Glu Ala Ala Trp Ser Thr Ala Gly		
65	70	75
Asp Gln Pro Met Pro Tyr Leu Thr Thr Tyr Gly Gln Met Ser Asn Gly		
85	90	95
Glu His His Tyr Ile Pro Asp Gly Val Phe Ser Gln Pro Gly Ala Leu		
100	105	110
Gly Asn Thr Pro Pro Phe Leu Gly Gln His Gly Phe Asn Phe Phe Pro		
115	120	125
Gly Asn Ala Asp Phe Ser Thr Trp Gly Thr Ser Gly Ser Gln Gly Gln		
130	135	140
Ser Thr Gln Ser Ser Ala Tyr Ser Ser Ser Tyr Gly Tyr Pro Pro Ser		
145	150	155
Ser Leu Gly Arg Ala Ile Thr Asp Gly Gln Ala Gly Phe Gly Asn Asp		
165	170	175
Thr Leu Ser Lys Val Pro Gly Ile Ser Ser Ile Glu Gln Gly Met Thr		
180	185	190
Gly Leu Lys Ile Gly Gly Asp Leu Thr Ala Ala Val Thr Lys Thr Val		
195	200	205
Gly Thr Ala Leu Ser Ser Ser Gly Met Thr Ser Ile Ala Thr Asn Ser		
210	215	220
Val Pro Pro Val Ser Ser Ala Ala Pro Lys Pro Thr Ser Trp Ala Ala		
225	230	235
Ile Ala Arg Lys Pro Ala Lys Pro Gln Pro Lys Leu Lys Pro Lys Gly		
245	250	255
Asn Val Gly Ile Gly Gly Ser Ala Val Pro Pro Pro Pro Ile Lys His		
260	265	270

Asn Met Asn Ile Gly Thr Trp Asp Glu Lys Gly Ser Val Val Lys Ala  
275 280 285

Pro Pro Thr Gln Pro Val Leu Pro Pro Gln Thr Ile Ile Gln Gln Pro  
290 295 300

Gln Pro Leu Ile Gln Pro Pro Pro Leu Val Gln Ser Gln Leu Pro Gln  
305 310 315 320

Gln Gln Pro Gln Pro Pro Gln Pro Gln Gln Gln Gly Pro Gln Pro  
325 330 335

Gln Ala Gln Pro His Gln Val Gln Pro Gln Gln Gln Gln Leu Gln Asn  
340 345 350

Arg Trp Val Ala Pro Arg Asn Arg Gly Ala Gly Phe Asn Gln Asn Asn  
355 360 365

Gly Ala Gly Ser Glu Asn Phe Gly Leu Gly Val Val Pro Val Ser Ala  
370 375 380

Ser Pro Ser Ser Val Glu Val His Pro Val Leu Glu Lys Leu Lys Ala  
385 390 395 400

Ile Asn Asn Tyr Asn Pro Lys Asp Phe Asp Trp Asn Leu Lys Asn Gly  
405 410 415

Arg Val Phe Ile Ile Lys Ser Tyr Ser Glu Asp Asp Ile His Arg Ser  
420 425 430

Ile Lys Tyr Ser Ile Trp Cys Ser Thr Glu His Gly Asn Lys Arg Leu  
435 440 445

Asp Ala Ala Tyr Arg Ser Leu Asn Gly Lys Gly Pro Leu Tyr Leu Leu  
450 455 460

Phe Ser Val Asn Gly Ser Gly His Phe Cys Gly Val Ala Glu Met Lys  
465 470 475 480

Ser Val Val Asp Tyr Asn Ala Tyr Ala Gly Val Trp Ser Gln Asp Lys  
485 490 495

Trp Lys Gly Lys Phe Glu Val Lys Trp Ile Phe Val Lys Asp Val Pro

500	505	510	
Asn Asn Gln Leu Arg His Ile Arg Leu Glu Asn Asn Asp Asn Lys Pro			
515	520	525	
Val Thr Asn Ser Arg Asp Thr Gln Glu Val Pro Leu Glu Lys Ala Lys			
530	535	540	
Gln Val Leu Lys Ile Ile Ala Thr Phe Lys His Thr Thr Ser Ile Phe			
545	550	555	560
Asp Asp Phe Ala His Tyr Glu Lys Arg Gln Glu Glu Glu Glu Ala Met			
565	570	575	
Arg Arg Glu Arg Asn Arg Asn Lys Gln			
580	585		

&lt;210&gt; 2866

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2866

Met Lys Leu Leu Ile Ile Val Phe Cys Tyr Pro Phe Asn Val Cys Arg
1 5 10 15
Ile Cys Gly Asn Val Ser Thr Phe Ile Pro Asp Ile Gly Asp Leu Cys
20 25 30
Phe Leu Phe Leu Ser Phe Lys Ile Thr Leu Pro Arg Gly Leu Ser Val
35 40 45
Ser Trp Ile Cys Phe Lys Asp Pro Ala Phe Gly Phe Ile Gly Phe Ser
50 55 60
Val Leu Asp Phe Ile Asn Phe Arg Ser Phe Leu Tyr Pro Ser Phe Cys
65 70 75 80

Leu Leu Trp Gly Leu Leu Gly Ser Ser Phe Thr Ile Lys Lys Ile Leu  
                             85                            90                            95  
 Ile Asn Leu Thr Pro  
                             100

<210> 2867

<211> 589

<212> PRT

<213> Homo sapiens

<400> 2867

Met Gln Ile Glu Val Thr Ala Trp Ile Gly Pro Glu Thr Glu Ser Glu  
     1                    5                    10                    15  
 Asn Glu Phe Arg Pro Leu Asp Glu Arg Ile Asp Glu Phe His Pro Lys  
                     20                    25                    30  
 Ala Thr Arg Thr Leu Phe Ile Gly Asn Leu Glu Lys Thr Thr Thr Tyr  
                     35                    40                    45  
 His Asp Leu Arg Asn Ile Phe Gln Arg Phe Gly Glu Ile Val Asp Ile  
                     50                    55                    60  
 Asp Ile Lys Lys Val Asn Gly Val Pro Gln Tyr Ala Phe Leu Gln Tyr  
     65                    70                    75                    80  
 Cys Asp Ile Ala Ser Val Cys Lys Ala Ile Lys Lys Met Asp Gly Glu  
                     85                    90                    95  
 Tyr Leu Gly Asn Asn Arg Leu Lys Leu Gly Phe Gly Lys Ser Met Pro  
                     100                    105                    110  
 Thr Asn Cys Val Trp Leu Asp Gly Leu Ser Ser Asn Val Ser Asp Gln  
                     115                    120                    125  
 Tyr Leu Thr Arg His Phe Cys Arg Tyr Gly Pro Val Val Lys Val Val



130 135 140  
Phe Asp Arg Leu Lys Gly Met Ala Leu Val Leu Tyr Asn Glu Ile Glu  
145 150 155 160  
Tyr Ala Gln Ala Ala Val Lys Glu Thr Lys Gly Arg Lys Ile Gly Gly  
165 170 175  
Asn Lys Ile Lys Val Asp Phe Ala Asn Arg Glu Ser Gln Leu Ala Phe  
180 185 190  
Tyr His Cys Met Glu Lys Ser Gly Gln Asp Ile Arg Asp Phe Tyr Glu  
195 200 205  
Met Leu Ala Glu Arg Arg Glu Glu Arg Arg Ala Ser Tyr Asp Tyr Asn  
210 215 220  
Gln Asp Arg Thr Tyr Tyr Glu Ser Val Arg Thr Pro Gly Thr Tyr Pro  
225 230 235 240  
Glu Asp Ser Arg Arg Asp Tyr Pro Ala Arg Gly Arg Glu Phe Tyr Ser  
245 250 255  
Glu Trp Glu Thr Tyr Gln Gly Asp Tyr Tyr Glu Ser Arg Tyr Tyr Asp  
260 265 270  
Asp Pro Arg Glu Tyr Arg Asp Tyr Arg Asn Asp Pro Tyr Glu Gln Asp  
275 280 285  
Ile Arg Glu Tyr Ser Tyr Arg Gln Arg Glu Arg Glu Arg Glu Arg Glu  
290 295 300  
Arg Phe Glu Ser Asp Arg Asp Arg Asp His Glu Arg Arg Pro Ile Glu  
305 310 315 320  
Arg Ser Gln Ser Pro Val His Leu Arg Arg Pro Gln Ser Pro Gly Ala  
325 330 335  
Ser Pro Ser Gln Ala Glu Arg Leu Pro Ser Asp Ser Glu Arg Arg Leu  
340 345 350  
Tyr Ser Arg Ser Ser Asp Arg Ser Gly Ser Cys Ser Ser Leu Ser Pro  
355 360 365

Pro Gly Tyr Glu Lys Leu Asp Lys Ser Arg Leu Glu Arg Tyr Thr Lys

370

375

380

Asn Glu Lys Thr Asp Lys Glu Arg Thr Phe Asp Pro Glu Arg Val Glu

385

390

395

400

Arg Glu Arg Arg Leu Ile Arg Lys Glu Lys Val Glu Lys Asp Lys Thr

405

410

415

Asp Lys Gln Lys Arg Lys Gly Lys Val His Ser Pro Ser Ser Gln Ser

420

425

430

Ser Glu Thr Asp Gln Glu Asn Glu Arg Glu Gln Ser Pro Glu Lys Pro

435

440

445

Arg Ser Cys Asn Lys Leu Ser Arg Glu Lys Ala Asp Lys Glu Gly Ile

450

455

460

Ala Lys Asn Arg Leu Glu Leu Met Pro Cys Val Val Leu Thr Arg Val

465

470

475

480

Lys Glu Lys Glu Gly Lys Val Ile Asp His Thr Pro Val Glu Lys Leu

485

490

495

Lys Ala Lys Leu Asp Asn Asp Thr Val Lys Ser Ser Ala Leu Asp Gln

500

505

510

Lys Leu Gln Val Ser Gln Thr Glu Pro Ala Lys Ser Asp Leu Ser Lys

515

520

525

Leu Glu Ser Val Arg Met Lys Val Pro Lys Glu Lys Gly Leu Ser Ser

530

535

540

His Val Glu Val Val Glu Lys Glu Gly Arg Leu Lys Ala Arg Lys His

545

550

555

560

Leu Lys Pro Glu Gln Pro Ala Asp Gly Val Ser Ala Val Asp Leu Glu

565

570

575

Lys Leu Glu Ala Arg Lys Arg Arg Phe Ala Asp Ser Asn

580

585

&lt;210&gt; 2868

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2868

Met Val Gln Arg Glu Lys Ala Arg Asp Asn Phe Glu Gly Gly Cys Leu

1 5 10 15

Ala Glu Leu Ile Gly Ser Pro Arg Asp Trp Lys Cys Phe Leu Ala Val

20 25 30

Pro Asp Pro Leu Leu Gly Val Gln His Trp Leu His Leu Trp Arg Pro

35 40 45

Gln Thr Lys Asp Gly Asn Ser Leu His Arg His Gly Asp Gln Ala Trp

50 55 60

Gly Lys His Arg Arg Gln Asn Ser Leu Lys Ser Pro Ala Leu Ser Gly

65 70 75 80

His Ser Ile Asp Tyr His Phe Tyr Pro Arg Leu Arg Cys Gly Met Leu

85 90 95

Ile Gly Pro Asp Lys Gln Ala Val Ala Ser Gly Leu Glu Val Leu Val

100 105 110

Thr Ser Ser Thr Lys Ile Leu Gly Gln Leu Phe Pro Asp Ala Ala His

115 120 125

Phe Leu Glu Glu Ala Ser Glu Phe Lys Ala Glu

130 135

&lt;210&gt; 2869

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2869

Met	Ala	Pro	Ser	Arg	Asn	Gly	Met	Val	Leu	Lys	Pro	His	Phe	His	Lys
1				5					10					15	
Asp	Trp	Gln	Arg	Arg	Val	Ala	Thr	Trp	Phe	Asn	Gln	Pro	Ala	Arg	Lys
				20				25					30		
Ile	Arg	Arg	Arg	Lys	Ala	Arg	Gln	Ala	Lys	Ala	Arg	Arg	Ile	Ala	Pro
				35				40					45		
Arg	Pro	Ala	Ser	Gly	Pro	Ile	Arg	Pro	Ile	Val	Arg	Cys	Pro	Thr	Val
				50			55				60				
Arg	Tyr	His	Thr	Lys	Val	Arg	Ala	Gly	Arg	Gly	Phe	Ser	Leu	Glu	Glu
65					70				75					80	
Leu	Arg	Val	Ala	Gly	Ile	His	Lys	Lys	Val	Ala	Arg	Thr	Ile	Gly	Ile
					85				90					95	
Ser	Val	Asp	Pro	Arg	Arg	Arg	Asn	Lys	Ser	Thr	Glu	Ser	Leu	Gln	Ala
				100				105					110		
Asn	Val	Gln	Arg	Leu	Lys	Glu	Tyr	Arg	Ser	Lys	Leu	Ile	Leu	Phe	Pro
				115				120					125		
Arg	Lys	Pro	Ser	Ala	Pro	Lys	Lys	Gly	Asp	Ser	Ser	Ala	Glu	Glu	Leu
				130			135					140			
Lys	Leu	Ala	Thr	Gln	Leu	Thr	Gly	Pro	Val	Met	Pro	Val	Arg	Asn	Val
145					150				155					160	
Tyr	Lys	Lys	Glu	Lys	Ala	Arg	Val	Ile	Thr	Glu	Glu	Glu	Lys	Asn	Phe
				165					170					175	
Lys	Ala	Phe	Ala	Ser	Leu	Arg	Met	Ala	Arg	Ala	Asn	Ala	Arg	Leu	Phe
				180					185					190	
Gly	Ile	Arg	Ala	Lys	Arg	Ala	Lys	Glu	Ala	Ala	Glu	Gln	Asp	Val	Glu

<210> 2870  
<211> 217  
<212> PRT  
<213> Homo sapiens

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Gly Asp Tyr Val Phe Met Arg Trp Lys Glu Gln Phe Leu Val Pro Asp  
 145                      150                      155                      160  
 His Thr Ile Lys Asp Ile Ser Gly Ala Ser Phe Ala Gly Phe Tyr Tyr  
                          165                      170                      175  
 Ile Cys Phe Gln Lys Ser Ala Ala Ser Ile Glu Gly Tyr Tyr Tyr His  
                          180                      185                      190  
 Arg Ser Ser Glu Trp Tyr Gln Ser Leu Asn Leu Thr His Val Pro Glu  
                          195                      200                      205  
 His Ser Ala Pro Ile Tyr Glu Phe Arg  
                          210                      215

<210> 2871

<211> 980

<212> PRT

<213> Homo sapiens

<400> 2871

Met Pro Pro Asn Phe Pro Glu Phe Ala Glu Arg Ile Glu Ala Ser Leu  
                          1                      5                      10                      15  
 Ser Glu Val Ser Glu Ala Gly Ala Ser Asn Pro Ser Leu Gln Glu Lys  
                          20                      25                      30  
 Lys Glu Ser Ser Ser Ala Leu Thr Glu Ser Ser Gly His Leu Asp His  
                          35                      40                      45  
 Arg Glu Pro Gln Ser Glu Ser Val Thr Leu Glu His Val Ser Lys Ser  
                          50                      55                      60  
 Ile Gly Ile Pro Glu Val Gln Asp Phe Lys Asn Leu Ser Gly Asp Cys  
                          65                      70                      75                      80  
 Gln Asp Phe Arg Phe Gln Gln His Ser Ala Asn Pro Pro His Lys Phe

	85	90	95
Gln Pro Val Glu Ser Glu Ala Val Ala Thr Ser Gly Asn Thr Asp Val			
100	105	110	
Met Gln Glu Ser Arg Phe Ser Ser Ala Thr Trp Pro Arg Ala Thr Lys			
115	120	125	
Ser Leu Ala Lys Gly Gly Phe Ser Glu Lys Gln His Pro Leu Gly Asp			
130	135	140	
Thr Ala Cys Thr Val Glu Met Pro Pro Leu Ser Pro Cys Leu Ser Glu			
145	150	155	160
Glu Leu Leu Asp Pro Glu Leu His Val Leu Ile Thr Pro Ser Leu Arg			
165	170	175	
Glu Lys Thr Glu Ser Glu Leu Lys Phe Glu Glu Asp Glu Arg Trp Ile			
180	185	190	
Met Met Glu Ala Glu Gly Glu Trp Glu Glu Glu Lys Leu Ser Asp Arg			
195	200	205	
Glu Lys Thr Phe Leu Met Ala Asp Glu Lys Asn Ser Leu Ala Asp Ile			
210	215	220	
Phe Glu Glu Arg Glu Gln Ala Asn Thr Ala Val Val Glu Asp Gly Ser			
225	230	235	240
Asp Cys Leu Ala Ala Val Leu Arg Thr Phe Gly His Leu Ser Leu Gly			
245	250	255	
Gln Ile Cys Cys Pro Asp Asp Pro Gln Pro Ala Lys Asp Gln Leu Ala			
260	265	270	
Thr Val Pro Lys Asp Ile Pro Leu Asp Cys Asp Cys Val Leu Thr Gly			
275	280	285	
Glu Asp Ile Leu Gly Glu Val Ala Asn Arg Thr Ala Gln Gly Leu Glu			
290	295	300	
Gly Leu Val Ser Asp Ser Ala Cys Thr Val Gly Thr Ile Asp Ala Glu			
305	310	315	320

出証特 2 0 0 4 - 3 0 5 9 6 6 1



545                      550                      555                      560  
Ser Leu Thr Ser Met Gly Asn Val Val Thr Cys Glu Leu Ser Val Glu  
                         565                      570                      575  
Lys Val Cys Asp Glu Asp Gly Glu Ala Lys Glu Leu Asp Tyr Gln Ala  
                         580                      585                      590  
Thr Leu Leu Glu Asp Gln Ala Pro Ala His Phe His Arg Asn Phe Pro  
                         595                      600                      605  
Glu Gln Val Phe Gln Asp Leu Gln Arg Lys Ser Pro Glu Ser Glu Ile  
                         610                      615                      620  
Leu Ser Leu His Leu Leu Val Glu Glu Leu Arg Leu Asn Pro Asp Gly  
625                      630                      635                      640  
Val Glu Thr Val Asn Asp Thr Lys Pro Glu Leu Asn Val Ala Ser Ser  
                         645                      650                      655  
Glu Gly Gly Glu Met Glu Arg Arg Asp Ser Asp Ser Phe Leu Asn Ile  
                         660                      665                      670  
Phe Pro Glu Lys Gln Val Thr Lys Ala Gly Asn Thr Glu Pro Val Leu  
                         675                      680                      685  
Glu Glu Trp Ile Pro Val Leu Gln Arg Pro Ser Arg Thr Ala Ala Val  
                         690                      695                      700  
Pro Thr Val Lys Asp Ala Leu Asp Ala Ala Leu Pro Ser Pro Glu Glu  
705                      710                      715                      720  
Gly Thr Ser Ile Ala Ala Val Pro Ala Pro Glu Gly Thr Ala Val Val  
                         725                      730                      735  
Ala Ala Leu Val Pro Phe Pro His Glu Asp Ile Leu Val Ala Ser Ile  
                         740                      745                      750  
Val Ser Leu Glu Glu Glu Asp Val Thr Ala Ala Ala Val Ser Ala Pro  
                         755                      760                      765  
Glu Arg Ala Thr Val Pro Ala Val Thr Val Ser Val Pro Glu Gly Thr  
                         770                      775                      780

Ala Ala Val Ala Ala Val Ser Ser Pro Glu Glu Thr Ala Pro Ala Val  
785 790 795 800  
Ala Ala Ala Ile Thr Gln Glu Gly Met Ser Ala Val Ala Gly Phe Ser  
805 810 815  
Pro Glu Trp Ala Ala Leu Ala Ile Thr Val Pro Ile Thr Glu Glu Asp  
820 825 830  
Gly Thr Pro Glu Gly Pro Val Thr Pro Ala Thr Thr Val His Ala Pro  
835 840 845  
Glu Glu Pro Asp Thr Ala Ala Val Arg Val Ser Thr Pro Glu Glu Pro  
850 855 860  
Ala Ser Pro Ala Ala Ala Val Pro Thr Pro Glu Glu Pro Thr Ser Pro  
865 870 875 880  
Ala Ala Ala Val Pro Thr Pro Glu Glu Pro Thr Ser Pro Ala Ala Ala  
885 890 895  
Val Pro Pro Pro Glu Glu Pro Thr Ser Pro Ala Ala Ala Val Pro Thr  
900 905 910  
Pro Glu Glu Pro Thr Ser Pro Ala Ala Ala Val Pro Thr Pro Glu Glu  
915 920 925  
Pro Thr Ser Pro Ala Ala Ala Val Pro Thr Pro Glu Glu Pro Thr Ser  
930 935 940  
Pro Ala Ala Ala Val Pro Thr Pro Glu Glu Pro Thr Ser Pro Ala Ala  
945 950 955 960  
Ala Val Pro Thr Pro Glu Asp Ala Pro His Pro Thr Thr His Ser Lys  
965 970 975  
Asn Pro Tyr Thr  
980

&lt;210&gt; 2872

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

Met Val Leu Ile Leu Thr Ser Glu Met Gly Trp Gly Thr Arg His Cys

1 5 10 15

Thr Trp Arg Pro Ala Pro Thr Thr Phe Leu Ser Ser Pro His Cys Tyr

20 25 30

Glu Glu Val Cys Gly Phe Phe Pro Ser Leu Ser Ser Phe Ser Pro Ser

35 40 45

Pro Pro Glu Cys Ser Pro Gln Leu Val Pro Ala Gly Ala Arg Val Asp

50 55 60

Ala Leu Asp Arg Ala Gly Arg Thr Pro Leu His Leu Ala Lys Ser Lys

65 70 75 80

Leu Asn Ile Leu Gln Glu Gly His Ala Gln Cys Leu Glu Ala Val Arg

85 90 95

Leu Glu Val Lys Gln Ile Ile His Met Leu Arg Glu Tyr Leu Glu Arg

100 105 110

Leu Gly Gln His Glu Gln Arg Glu Arg Leu Asp Asp Leu Cys Thr Arg

115 120 125

Leu Gln Met Thr Ser Thr Lys Glu Gln Val Asp Glu Val Thr Asp Leu

130 135 140

Leu Ala Ser Phe Thr Ser Leu Ser Leu Gln Met Gln Ser Met Glu Lys

145 150 155 160

Arg

&lt;210&gt; 2873

&lt;211&gt; 362

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2873

Met Thr Gln Glu Leu Ser Phe Gln Lys Phe Ile Glu Gln Ser Asp Leu

1 5 10 15

Leu Gly Glu Leu Lys Tyr Asp Phe Asn Glu Lys Asp Glu Phe Arg His

20 25 30

Thr Glu Thr Gln Arg Pro Phe Val Phe Asn Tyr Tyr Glu Asn Val Leu

35 40 45

Glu Lys Asn Ser Lys Arg Tyr Gln Ala Leu Gly His Leu Leu Glu Gln

50 55 60

Tyr Ile Tyr Glu Leu Leu Glu Lys Val Cys Lys Leu Glu Lys Val Tyr

65 70 75 80

Ile Pro Pro Glu Ala Asp Lys Glu Glu Pro Arg Ser Phe Phe Phe Met

85 90 95

Ser Glu Lys Ala Leu Thr Asn His His Ser Ala Leu Leu Ile Leu Leu

100 105 110

Gln Asp His Gly Val Phe Arg Ala Gly Gln Trp Ser Gln Gln Ala Ile

115 120 125

Ile His His Gly Leu Gln His Gly Ser Gln Ile Pro Cys Ile Gln Met

130 135 140

Ala Leu Gln Ala His Tyr Asp Val Ile Val Leu Asn Pro Asn Asp Asn

145 150 155 160

Phe Val Glu Pro Lys Val Glu Lys Glu Trp Lys Gly Leu Leu Thr Gln

165 170 175

Asn Ile Glu Ser Ser Ser Leu Lys Met Val Gln Gly Gly Ser Phe Phe

180 185 190  
Ser Leu Gln His Pro Pro Lys Cys Ile Pro Lys Arg Cys Ser Asn Thr  
195 200 205  
Pro Glu Glu His Thr Ala Tyr Ile Trp Asp Tyr Phe Ile Ser Lys Thr  
210 215 220  
Glu Gly Lys Asp Ile Ala Phe Ile Val His Gly Tyr Gly Gly Leu Val  
225 230 235 240  
Phe Met Asp Leu Leu Val Arg Arg Arg Trp Glu Val Met Ser Lys Val  
245 250 255  
Tyr Ala Val Ala Leu Ile Asp Ser Glu His His Val Gly His Gln Leu  
260 265 270  
Gly Ser Asp Val Gln Leu Leu Ala Trp Ile Lys His His Cys Arg Glu  
275 280 285  
Trp Val Thr Ser Pro Lys Pro Leu Asp Lys Pro Ala Ala Thr Val Phe  
290 295 300  
Lys Lys Glu Phe Pro Met Val Ser Ala Gly Thr Glu Lys Tyr Ile Leu  
305 310 315 320  
Ala Pro Ser Ser Ser Leu Gln Ser Ile Phe Lys Tyr Phe Lys Lys Ala  
325 330 335  
Leu Lys Ala Arg Thr Thr Ile Asn Phe Ser Arg Met Pro Ile Val Thr  
340 345 350  
Arg Ser Ser Thr Lys Arg Lys Gln Ser Ala  
355 360

&lt;210&gt; 2874

&lt;211&gt; 518

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

Met Ser Glu Ser Arg Gln Thr His Val Thr Leu His Asp Ile Asp Pro  
 1 5 10 15  
 Gln Ala Leu Asp Gln Leu Val Gln Phe Ala Tyr Thr Ala Glu Ile Val  
 20 25 30  
 Val Gly Glu Gly Asn Val Gln Thr Leu Leu Pro Ala Ala Ser Leu Leu  
 35 40 45  
 Gln Leu Asn Gly Val Arg Asp Ala Cys Cys Lys Phe Leu Leu Ser Gln  
 50 55 60  
 Leu Asp Pro Ser Asn Cys Leu Gly Ile Arg Gly Phe Ala Asp Ala His  
 65 70 75 80  
 Ser Cys Ser Asp Leu Leu Lys Ala Ala His Arg Tyr Val Leu Gln His  
 85 90 95  
 Phe Val Asp Val Ala Lys Thr Glu Glu Phe Met Leu Leu Pro Leu Lys  
 100 105 110  
 Gln Val Leu Glu Leu Val Ser Ser Asp Ser Leu Asn Val Pro Ser Glu  
 115 120 125  
 Glu Glu Val Tyr Arg Ala Val Leu Ser Trp Val Lys His Asp Val Asp  
 130 135 140  
 Ala Arg Arg Gln His Val Pro Arg Leu Met Lys Cys Val Arg Leu Pro  
 145 150 155 160  
 Leu Leu Ser Arg Asp Phe Leu Leu Gly His Val Asp Ala Glu Ser Leu  
 165 170 175  
 Val Arg His His Pro Asp Cys Lys Asp Leu Leu Ile Glu Ala Leu Lys  
 180 185 190  
 Phe His Leu Leu Pro Glu Gln Arg Gly Val Leu Gly Thr Ser Arg Thr  
 195 200 205  
 Arg Pro Arg Arg Cys Glu Gly Ala Gly Pro Val Leu Phe Ala Val Gly

210	215	220
Gly Gly Ser Leu Phe Ala Ile His Gly Asp Cys Glu Ala Tyr Asp Thr		
225	230	235
Arg Thr Asp Arg Trp His Val Val Ala Ser Met Ser Thr Arg Arg Ala		
245	250	255
Arg Val Gly Val Ala Ala Val Gly Asn Arg Leu Tyr Ala Val Gly Gly		
260	265	270
Tyr Asp Gly Thr Ser Asp Leu Ala Thr Val Glu Ser Tyr Asp Pro Val		
275	280	285
Thr Asn Thr Trp Gln Pro Glu Val Ser Met Gly Thr Arg Arg Ser Cys		
290	295	300
Leu Gly Val Ala Ala Leu His Gly Leu Leu Tyr Ser Ala Gly Gly Tyr		
305	310	315
Asp Gly Ala Ser Cys Leu Asn Ser Ala Glu Arg Tyr Asp Pro Leu Thr		
325	330	335
Gly Thr Trp Thr Ser Val Ala Ala Met Ser Thr Arg Arg Arg Tyr Val		
340	345	350
Arg Val Ala Thr Leu Asp Gly Asn Leu Tyr Ala Val Gly Gly Tyr Asp		
355	360	365
Ser Ser Ser His Leu Ala Thr Val Glu Lys Tyr Glu Pro Gln Val Asn		
370	375	380
Val Trp Ser Pro Val Ala Ser Met Leu Ser Arg Arg Ser Ser Ala Gly		
385	390	395
Val Ala Val Leu Glu Gly Ala Leu Tyr Val Ala Gly Gly Asn Asp Gly		
405	410	415
Thr Ser Cys Leu Asn Ser Val Glu Arg Tyr Ser Pro Lys Ala Gly Ala		
420	425	430
Trp Glu Ser Val Ala Pro Met Asn Ile Arg Arg Ser Thr His Asp Leu		
435	440	445

Val Ala Met Asp Gly Trp Leu Tyr Ala Val Gly Gly Asn Asp Gly Ser  
 450 455 460  
 Ser Ser Leu Asn Ser Ile Glu Lys Tyr Asn Pro Arg Thr Asn Lys Trp  
 465 470 475 480  
 Val Ala Ala Ser Cys Met Phe Thr Arg Arg Ser Ser Val Gly Val Ala  
 485 490 495  
 Val Leu Glu Leu Leu Asn Phe Pro Pro Pro Ser Ser Pro Thr Leu Ser  
 500 505 510  
 Val Ser Ser Thr Ser Leu  
 515

<210> 2875

<211> 608

<212> PRT

<213> Homo sapiens

<400> 2875

Met Pro Phe Trp Pro Ile Arg Cys Leu Lys Arg Ser Arg Arg Met Pro  
 1 5 10 15  
 Arg Gly Gly Ala Gly Glu Arg Glu Lys Val Pro Ala Asn Pro Glu Ala  
 20 25 30  
 Leu Leu Leu Met Ala Ser Ser Gln Arg Asp Met Glu Asp Trp Val Gln  
 35 40 45  
 Ala Ile Arg Arg Val Ile Trp Ala Pro Leu Gly Gly Gly Ile Phe Gly  
 50 55 60  
 Gln Arg Leu Glu Glu Thr Val His His Glu Arg Lys Tyr Gly Pro Arg  
 65 70 75 80  
 Leu Ala Pro Leu Leu Val Glu Gln Cys Val Asp Phe Ile Arg Glu Arg



	85	90	95
Gly Leu Thr Glu Glu Gly Leu Phe Arg Met Pro Gly Gln Ala Asn Leu			
100	105	110	
Val Arg Asp Leu Gln Asp Ser Phe Asp Cys Gly Glu Lys Pro Leu Phe			
115	120	125	
Asp Ser Thr Thr Asp Val His Thr Val Ala Ser Leu Leu Lys Leu Tyr			
130	135	140	
Leu Arg Glu Leu Pro Glu Pro Val Val Pro Phe Ala Arg Tyr Glu Asp			
145	150	155	160
Phe Leu Ser Cys Ala Gln Leu Leu Thr Lys Asp Glu Gly Glu Gly Thr			
165	170	175	
Leu Glu Leu Ala Lys Gln Val Ser Asn Leu Pro Gln Ala Asn Tyr Asn			
180	185	190	
Leu Leu Arg Tyr Ile Cys Lys Phe Leu Asp Glu Val Gln Ala Tyr Ser			
195	200	205	
Asn Val Asn Lys Met Ser Val Gln Asn Leu Ala Thr Val Phe Gly Pro			
210	215	220	
Asn Ile Leu Arg Pro Gln Val Glu Asp Pro Val Thr Ile Met Glu Gly			
225	230	235	240
Thr Ser Leu Val Gln His Leu Met Thr Val Leu Ile Arg Lys His Ser			
245	250	255	
Gln Leu Phe Thr Ala Pro Val Pro Glu Gly Pro Thr Ser Pro Arg Gly			
260	265	270	
Gly Leu Gln Cys Ala Val Gly Trp Gly Ser Glu Glu Val Thr Arg Asp			
275	280	285	
Ser Gln Gly Glu Pro Gly Gly Pro Gly Leu Pro Ala His Arg Thr Ser			
290	295	300	
Ser Leu Asp Gly Ala Ala Val Ala Val Leu Ser Arg Thr Ala Pro Thr			
305	310	315	320

Gly Pro Gly Ser Arg Cys Ser Pro Gly Lys Lys Val Gln Thr Leu Pro  
 325 330 335  
 Ser Trp Lys Ser Ser Phe Arg Gln Pro Arg Ser Leu Ser Gly Ser Pro  
 340 345 350  
 Lys Gly Gly Gly Ser Ser Leu Glu Val Pro Ile Ile Ser Ser Gly Gly  
 355 360 365  
 Asn Trp Leu Met Asn Gly Leu Ser Ser Leu Arg Gly His Arg Arg Ala  
 370 375 380  
 Ser Ser Gly Asp Arg Leu Lys Asp Ser Gly Ser Val Gln Arg Leu Ser  
 385 390 395 400  
 Thr Tyr Asp Asn Val Pro Ala Pro Gly Leu Val Pro Gly Ile Pro Ser  
 405 410 415  
 Val Ala Ser Met Ala Trp Ser Gly Ala Ser Ser Ser Glu Ser Ser Val  
 420 425 430  
 Gly Gly Ser Leu Ser Ser Cys Thr Ala Cys Arg Ala Ser Asp Ser Ser  
 435 440 445  
 Ala Arg Ser Ser Leu His Thr Asp Trp Ala Leu Glu Pro Ser Pro Leu  
 450 455 460  
 Pro Ser Ser Ser Glu Asp Pro Lys Ser Leu Asp Leu Asp His Ser Met  
 465 470 475 480  
 Asp Glu Ala Gly Ala Gly Ala Ser Asn Ser Glu Pro Ser Glu Pro Asp  
 485 490 495  
 Ser Pro Thr Arg Glu His Ala Arg Arg Ser Glu Ala Leu Gln Gly Leu  
 500 505 510  
 Val Thr Glu Leu Arg Ala Glu Leu Cys Arg Gln Arg Thr Glu Tyr Glu  
 515 520 525  
 Arg Ser Val Lys Arg Ile Glu Glu Gly Ser Ala Asp Leu Arg Lys Arg  
 530 535 540  
 Met Ser Arg Leu Glu Glu Glu Leu Asp Gln Glu Lys Lys Lys Tyr Ile

545                      550                      555                      560  
 Met Leu Glu Ile Lys Leu Arg Asn Ser Glu Arg Ala Arg Glu Asp Ala  
                          565                      570                      575  
 Glu Arg Arg Asn Gln Leu Leu Gln Arg Glu Met Glu Glu Phe Phe Ser  
                          580                      585                      590  
 Thr Leu Gly Ser Leu Thr Val Gly Ala Lys Gly Ala Arg Ala Pro Lys  
                          595                      600                      605

<210> 2876

<211> 297

<212> PRT

<213> Homo sapiens

<400> 2876

Met Gly Asn Val Pro Ser Ala Val Lys His Cys Leu Ser Tyr Gln Gln  
     1                      5                      10                      15  
 Leu Leu Arg Glu His Leu Trp Ile Gly Asp Ser Val Ala Gly Ala Leu  
                          20                      25                      30  
 Asp Pro Ala Gln Thr Ser Leu Leu Thr Asn Leu His Cys Phe Gln Pro  
                          35                      40                      45  
 Asp Val Ser Gly Phe Ser Val Ser Leu Ala Gly Thr Val Ala Cys Ile  
                          50                      55                      60  
 His Trp Glu Thr Ser Gln Leu Ser Gly Leu Pro Glu Phe Val Lys Ile  
                          65                      70                      75                      80  
 Val Glu Val Gly Pro Arg Asp Gly Leu Gln Asn Glu Lys Val Ile Val  
                          85                      90                      95  
 Pro Thr Asp Ile Lys Ile Glu Phe Ile Asn Arg Leu Ser Gln Thr Gly  
                          100                      105                      110

Leu Ser Val Ile Glu Val Thr Ser Phe Val Ser Ser Arg Trp Val Pro  
115 120 125  
Gln Met Ala Asp His Thr Glu Val Met Lys Gly Ile His Gln Tyr Pro  
130 135 140  
Gly Val Arg Tyr Pro Val Leu Thr Pro Asn Leu Gln Gly Phe His His  
145 150 155 160  
Ala Val Ala Ala Gly Ala Thr Glu Ile Ser Val Phe Gly Ala Ala Ser  
165 170 175  
Glu Ser Phe Ser Lys Lys Asn Ile Asn Cys Ser Ile Glu Glu Ser Met  
180 185 190  
Gly Lys Phe Glu Glu Val Val Lys Ser Ala Arg His Met Asn Ile Pro  
195 200 205  
Ala Arg Gly Tyr Val Ser Cys Ala Leu Gly Cys Pro Tyr Glu Gly Ser  
210 215 220  
Ile Thr Pro Gln Lys Val Thr Glu Val Ser Lys Arg Leu Tyr Gly Met  
225 230 235 240  
Gly Cys Tyr Glu Ile Ser Leu Gly Asp Thr Ile Gly Val Gly Thr Pro  
245 250 255  
Gly Ser Met Lys Arg Met Leu Glu Ser Val Met Lys Glu Ile Pro Pro  
260 265 270  
Gly Ala Leu Ala Val His Cys His Asp Thr Arg Thr Ser Leu Ser Lys  
275 280 285  
Tyr Pro Tyr Gly Pro Ser Asp Gly Asn  
290 295

&lt;210&gt; 2877

&lt;211&gt; 103

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2877

Met Glu Met Ser Gly Val Arg Phe Tyr Lys Phe Arg Pro Asp Tyr Ser  
1 5 10 15  
Gln Val Phe Ala Glu Pro Pro Arg Val Cys Phe Arg Ser Val Phe Ala  
20 25 30  
Ala Ser Phe Cys Thr Asp Leu Ser Phe Val Ser Phe Pro Leu Lys Thr  
35 40 45  
Gly Gly Ser Gly Leu Ala Val Leu Gly Tyr Thr Ala Ala Asp Gly Val  
50 55 60  
Ala His His Gly Gln Arg Ser His Met Arg Glu Arg Gly Gly Arg Val  
65 70 75 80  
Asp Met Ser His Pro Cys His Phe Pro Ala Gly Asn Ser Thr Ser His  
85 90 95  
Met Gln Gly Pro Gln Trp Ile  
100

<210> 2878

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2878

Met Glu Thr Ala Asn Gly Glu Glu Pro Pro Ala Gly Pro Pro Val Ser  
1 5 10 15  
Leu His Gly Arg Arg Leu Leu Arg Val Gly Gly Ala Cys Pro Thr Pro  
20 25 30

Leu Pro Val Leu Gln Arg Leu Pro Pro Ser Ala Leu His His Thr Leu  
                   35                                  40                                  45  
 His Arg Val Pro Arg Arg Val Cys Val Ser Pro Leu Gly Gln Val Thr  
                   50                                  55                                  60  
 Arg Ile Pro Pro Val Arg Thr Val Arg Arg Ala Pro Ser Gly Leu Leu  
                   65                                  70                                  75                                  80  
 Pro Gln Arg Arg Gly Gly Pro Ser Trp Trp Pro Pro Ser Gly Val Ala  
                                   85                                  90                                  95  
 Arg Gly Gly Pro Ser Trp Trp Pro Pro Ser Gly Val Val Arg Gly Gly  
                                   100                                  105                                  110  
 Pro Ser Ser Trp Pro Pro Ser Gly Val Ala Glu Pro Arg Glu Ala Leu  
                   115                                  120                                  125  
 Gly Leu Pro  
                   130

&lt;210&gt; 2879

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2879

Met Leu Arg Ser Pro Thr Phe Thr Asp Ala Gly Pro Arg Cys Ser Cys  
           1                                  5                                  10                                  15  
 Leu Pro Val Ser Gln Thr Leu Asp Ser Met Asp Thr Val Leu Met Gly  
                   20                                  25                                  30  
 Ser Leu Gln His Cys Cys Cys Leu Leu Pro Lys Met Gly Asp Thr Trp  
                   35                                  40                                  45  
 Ala Gln Leu Pro Trp Pro Gly Pro Pro His Pro Ala Met Leu Leu Ile

50	55	60
Ser Leu Leu Leu Ala Ala Gly Leu Met His Ser Asp Ala Gly Thr Ser		
65	70	75
Cys Pro Val Leu Cys Thr Cys Arg Asn Gln Val Val Asp Cys Ser Ser		
85	90	95
Gln Arg Leu Phe Ser Val Pro Pro Asp Leu Pro Met Asp Thr Arg Asn		
100	105	110
Leu Ser Leu Ala His Asn Arg Ile Thr Ala Val Pro Pro Gly Tyr Leu		
115	120	125
Thr Cys Tyr Met Glu Leu Gln Val Leu Asp Leu His Asn Asn Ser Leu		
130	135	140
Met Glu Leu Pro Arg Gly Leu Phe Leu His Ala Lys Arg Leu Ala His		
145	150	155
Leu Asp Leu Ser Tyr Asn Asn Phe Ser His Val Pro Ala Asp Met Phe		
165	170	175
Gln Glu Ala His Gly Leu Val His Ile Asp Leu Ser His Asn Pro Trp		
180	185	190
Leu Arg Arg Val His Pro Gln Ala Phe Gln Gly Leu Met Gln Leu Arg		
195	200	205
Asp Leu Asp Leu Ser Tyr Gly Gly Leu Ala Phe Leu Ser Leu Glu Ala		
210	215	220
Leu Glu Gly Leu Pro Gly Leu Val Thr Leu Gln Ile Gly Gly Asn Pro		
225	230	235
Trp Val Cys Gly Cys Thr Met Glu Pro Leu Leu Lys Trp Leu Arg Asn		
245	250	255
Arg Ile Gln Arg Cys Thr Ala Asp Ser Gln Leu Ala Glu Cys Arg Gly		
260	265	270
Pro Pro Glu Val Glu Gly Ala Pro Leu Phe Ser Leu Thr Glu Glu Ser		
275	280	285

Phe Lys Ala Cys His Leu Thr Leu Thr Leu Asp Asp Tyr Leu Phe Ile  
 290 295 300  
 Ala Phe Val Gly Phe Val Val Ser Ile Ala Ser Val Ala Thr Asn Phe  
 305 310 315 320  
 Leu Leu Gly Ile Thr Ala Asn Cys Cys His Arg Trp Ser Lys Ala Ser  
 325 330 335  
 Glu Glu Glu Glu Ile  
 340

<210> 2880

<211> 549

<212> PRT

<213> Homo sapiens

<400> 2880

Met Glu Gly Pro Arg Ser Ala Ala Cys Arg Ala Arg Pro Ala Thr Ser  
 1 5 10 15  
 Pro Gly Ala Val Asp Leu Thr Ala Pro Pro Pro Pro Pro Leu Leu Arg  
 20 25 30  
 Ile Leu Asn Ser Arg Ala Ala Pro Ala Thr Arg Thr Phe Ala Asp Leu  
 35 40 45  
 Cys Arg Ser Leu Leu Gln Pro Glu Ser Arg Val Leu Cys Arg Leu Gln  
 50 55 60  
 Pro Val Asn Cys Tyr Pro Pro Ala Ala Ser Thr Lys Leu Cys Pro Val  
 65 70 75 80  
 Gly Val Ile Arg Cys Pro Val Cys Ser Gln Glu Cys Ala Glu Arg His  
 85 90 95  
 Ile Ile Asp Asn Phe Phe Val Lys Asp Thr Thr Glu Val Pro Ser Ser



100	105	110
Thr Val Glu Lys Ser Asn Gln Val Cys Thr Ser Cys Glu Asp Asn Ala		
115	120	125
Glu Ala Asn Gly Phe Cys Val Glu Cys Val Glu Trp Leu Cys Lys Thr		
130	135	140
Cys Ile Arg Ala His Gln Arg Val Lys Phe Thr Lys Asp His Thr Val		
145	150	155
Arg Gln Lys Glu Glu Val Ser Pro Glu Ala Val Gly Val Thr Ser Gln		
165	170	175
Arg Pro Val Phe Cys Pro Phe His Lys Lys Glu Gln Leu Lys Leu Tyr		
180	185	190
Cys Glu Thr Cys Asp Lys Leu Thr Cys Arg Asp Cys Gln Leu Leu Glu		
195	200	205
His Lys Glu His Arg Tyr Gln Phe Ile Glu Glu Ala Phe Gln Asn Gln		
210	215	220
Lys Val Ile Ile Asp Thr Leu Ile Thr Lys Leu Met Glu Lys Thr Lys		
225	230	235
Tyr Ile Lys Phe Thr Gly Asn Gln Ile Gln Asn Arg Ile Ile Glu Val		
245	250	255
Asn Gln Asn Gln Lys Gln Val Glu Gln Asp Ile Lys Val Ala Ile Phe		
260	265	270
Thr Leu Met Val Glu Ile Asn Lys Lys Gly Lys Ala Leu Leu His Gln		
275	280	285
Leu Glu Ser Leu Ala Glu Asp His Arg Met Lys Leu Met Gln Gln Gln		
290	295	300
Gln Glu Val Ala Gly Leu Ser Lys Gln Leu Glu His Val Met His Phe		
305	310	315
Ser Lys Trp Ala Val Ser Ser Gly Ser Ser Thr Ala Leu Leu Tyr Ser		
325	330	335

Lys Arg Leu Ile Thr Tyr Arg Leu Arg His Leu Leu Arg Ala Arg Cys  
340 345 350  
Asp Ala Ser Pro Val Thr Asn Asn Thr Ile Gln Phe His Cys Asp Pro  
355 360 365  
Ser Phe Trp Ala Gln Asn Ile Ile Asn Leu Gly Ser Leu Val Ile Glu  
370 375 380  
Asp Lys Glu Ser Gln Pro Gln Met Pro Lys Gln Asn Pro Val Val Glu  
385 390 395 400  
Gln Asn Ser Gln Pro Pro Ser Gly Leu Ser Ser Asn Gln Leu Ser Lys  
405 410 415  
Phe Pro Thr Gln Ile Ser Leu Ala Gln Leu Arg Leu Gln His Met Gln  
420 425 430  
Gln Gln Gln Pro Pro Pro Arg Leu Ile Asn Phe Gln Asn His Ser Pro  
435 440 445  
Lys Pro Asn Gly Pro Val Leu Pro Pro His Pro Gln Gln Leu Arg Tyr  
450 455 460  
Pro Pro Asn Gln Asn Ile Pro Arg Gln Ala Ile Lys Pro Asn Pro Leu  
465 470 475 480  
Gln Met Ala Phe Leu Ala Gln Gln Ala Ile Lys Gln Trp Gln Ile Ser  
485 490 495  
Ser Gly Gln Gly Thr Pro Ser Thr Thr Gln Asn Ile Asn Thr Ala Ala  
500 505 510  
Cys Thr Val Phe Asp Val Arg Val Leu His His Ile Pro Tyr Trp Ala  
515 520 525  
Leu Asn Ile Ser Ser Ser Glu Arg Asp Ser Phe Leu Trp Phe Ser Ser  
530 535 540  
Val Tyr Asn Leu Glu  
545

&lt;210&gt; 2881

&lt;211&gt; 529

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2881

Met Gly Ala Tyr Leu Ser Gln Pro Asn Thr Val Lys Cys Ser Gly Asp

1 5 10 15

Gly Val Gly Phe Ser Met Glu Asp Ala His Asn Cys Ile Pro Glu Leu

20 25 30

Asp Ser Glu Thr Ala Met Phe Ser Val Tyr Asp Gly His Gly Gly Glu

35 40 45

Glu Val Ala Leu Tyr Cys Ala Lys Tyr Leu Pro Asp Ile Ile Lys Asp

50 55 60

Gln Lys Ala Tyr Lys Glu Gly Lys Leu Gln Lys Ala Leu Glu Asp Ala

65 70 75 80

Phe Leu Ala Ile Asp Ala Lys Leu Thr Thr Glu Glu Val Ile Lys Glu

85 90 95

Leu Ala Gln Ile Ala Gly Arg Pro Thr Glu Asp Glu Asp Glu Lys Glu

100 105 110

Lys Val Ala Asp Glu Asp Asp Val Asp Asn Glu Glu Ala Ala Leu Leu

115 120 125

His Glu Glu Ala Thr Met Thr Ile Glu Glu Leu Leu Thr Arg Tyr Gly

130 135 140

Gln Asn Cys His Lys Gly Pro Pro His Ser Lys Ser Gly Gly Gly Thr

145 150 155 160

Gly Glu Glu Pro Gly Ser Gln Gly Leu Asn Gly Glu Ala Gly Pro Glu

165 170 175

Asp Ser Thr Arg Glu Thr Pro Ser Gln Glu Asn Gly Pro Thr Ala Lys  
 180 185 190  
 Ala Tyr Thr Gly Phe Ser Ser Asn Ser Glu Arg Gly Thr Glu Ala Gly  
 195 200 205  
 Gln Val Gly Glu Pro Gly Ile Pro Thr Gly Glu Ala Gly Pro Ser Cys  
 210 215 220  
 Ser Ser Ala Ser Asp Lys Leu Pro Arg Val Ala Lys Ser Lys Phe Phe  
 225 230 235 240  
 Glu Asp Ser Glu Asp Glu Ser Asp Glu Ala Glu Glu Glu Glu Glu Asp  
 245 250 255  
 Ser Glu Glu Cys Ser Glu Glu Glu Asp Gly Tyr Ser Ser Glu Glu Ala  
 260 265 270  
 Glu Asn Glu Glu Asp Glu Asp Asp Thr Glu Glu Ala Glu Glu Asp Asp  
 275 280 285  
 Glu Glu Glu Glu Glu Glu Met Met Val Pro Gly Met Glu Gly Lys Glu  
 290 295 300  
 Glu Pro Gly Ser Asp Ser Gly Thr Thr Ala Val Val Ala Leu Ile Arg  
 305 310 315 320  
 Gly Lys Gln Leu Ile Val Ala Asn Ala Gly Asp Ser Arg Cys Val Val  
 325 330 335  
 Ser Glu Ala Gly Lys Ala Leu Asp Met Ser Tyr Asp His Lys Pro Glu  
 340 345 350  
 Asp Glu Val Glu Leu Ala Arg Ile Lys Asn Ala Gly Gly Lys Val Thr  
 355 360 365  
 Met Asp Gly Arg Val Asn Gly Gly Leu Asn Leu Ser Arg Ala Ile Gly  
 370 375 380  
 Asp His Phe Tyr Lys Arg Asn Lys Asn Leu Pro Pro Glu Glu Gln Met  
 385 390 395 400  
 Ile Ser Ala Leu Pro Asp Ile Lys Val Leu Thr Leu Thr Asp Asp His

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Ala Phe Asp Asn Asn Ser Asp Ile Ala Glu Asp Gly Gly Gln Thr Pro  
                   35                                  40                                  45  
 Tyr Glu Ala Thr Leu Gln Gln Gly Phe Gln Tyr Pro Ala Thr Thr Glu  
                   50                                  55                                  60  
 Asp Leu Pro Pro Gln Pro Pro Pro Pro Pro Ser Val Pro Gln Thr Val  
                   65                                  70                                  75                                  80  
 Ile Pro Lys Lys Thr Gly Ser Pro Glu Ile Lys Leu Lys Ile Thr Lys  
                                   85                                  90                                  95  
 Thr Ile Gln Asn Gly Arg Glu Leu Phe Glu Ser Ser Leu Cys Gly Asp  
                                   100                                  105                                  110  
 Leu Leu Asn Glu Val Gln Ala Ser Glu His Thr Lys Ser Lys His Glu  
                                   115                                  120                                  125  
 Ser Arg Lys Glu Lys Arg Lys Lys Ser Asn Lys His Asp Ser Ser Arg  
                                   130                                  135                                  140  
 Ser Glu Glu Arg Lys Ser His Lys Ile Pro Lys Leu Glu Pro Glu Glu  
                                   145                                  150                                  155                                  160  
 Gln Asn Arg Pro Asn Glu Arg Val Asp Thr Val Ser Glu Lys Pro Arg  
                                   165                                  170                                  175  
 Glu Glu Pro Val Leu Lys Glu Glu Ala Pro Val Gln Pro Ile Leu Ser  
                                   180                                  185                                  190  
 Ser Val Pro Thr Thr Glu Val Ser Thr Gly Val Lys Phe Gln Val Gly  
                                   195                                  200                                  205  
 Asp Leu Val Trp Ser Lys Val Gly Thr Tyr Pro Trp Trp Pro Cys Met  
                                   210                                  215                                  220  
 Val Ser Ser Asp Pro Gln Leu Glu Val His Thr Lys Ile Asn Thr Arg  
                                   225                                  230                                  235                                  240  
 Gly Ala Arg Glu Tyr His Val Gln Phe Phe Ser Asn Gln Pro Glu Arg  
                                   245                                  250                                  255  
 Ala Trp Val His Glu Lys Arg Val Arg Glu Tyr Lys Gly His Lys Gln

260                      265                      270  
 Tyr Glu Glu Leu Leu Ala Glu Ala Thr Lys Gln Ala Ser Asn His Ser  
 275                      280                      285  
 Glu Lys Gln Lys Ile Arg Lys Pro Arg Pro Gln Arg Glu Arg Ala Gln  
 290                      295                      300  
 Trp Asp Ile Gly Ile Ala His Ala Glu Lys Ala Leu Lys Met Thr Arg  
 305                      310                      315                      320

<210> 2883

<211> 435

<212> PRT

<213> Homo sapiens

<400> 2883

Met Thr Pro Gly Leu Gln His Pro Pro Thr Val Val Gln Arg Pro Gly  
 1                      5                      10                      15  
 Met Pro Ser Gly Ala Arg Met Pro His Gln Gly Ala Pro Met Gly Pro  
 20                      25                      30  
 Pro Gly Ser Pro Tyr Met Gly Ser Pro Thr Ala Pro Ala Arg Ser Arg  
 35                      40                      45  
 Ser Ala Lys Arg Arg Lys Met Ala Asp Lys Ile Leu Pro Gln Arg Ile  
 50                      55                      60  
 Arg Glu Leu Val Pro Glu Ser Gln Ala Tyr Met Asp Leu Leu Ala Phe  
 65                      70                      75                      80  
 Glu Arg Lys Leu Asp Gln Thr Ile Met Arg Lys Arg Val Asp Ile Gln  
 85                      90                      95  
 Glu Ala Leu Lys Arg Pro Met Lys Gln Lys Arg Lys Leu Arg Leu Tyr  
 100                      105                      110

Ile Ser Asn Thr Phe Asn Pro Ala Lys Pro Asp Ala Glu Asp Ser Asp  
 115 120 125  
 Gly Ser Ile Ala Ser Trp Glu Leu Arg Val Glu Gly Lys Leu Leu Asp  
 130 135 140  
 Asp Pro Ser Lys Gln Lys Arg Lys Phe Ser Ser Phe Phe Lys Ser Leu  
 145 150 155 160  
 Val Ile Glu Leu Asp Lys Asp Leu Tyr Gly Pro Asp Asn His Leu Val  
 165 170 175  
 Glu Trp His Arg Thr Pro Thr Thr Gln Glu Thr Asp Gly Phe Gln Val  
 180 185 190  
 Lys Arg Pro Gly Asp Leu Ser Val Arg Cys Thr Leu Leu Leu Met Leu  
 195 200 205  
 Asp Tyr Gln Pro Pro Gln Phe Lys Leu Asp Pro Arg Leu Ala Arg Leu  
 210 215 220  
 Leu Gly Leu His Thr Gln Ser Arg Ser Ala Ile Val Gln Ala Leu Trp  
 225 230 235 240  
 Gln Tyr Val Lys Thr Asn Arg Leu Gln Asp Ser His Asp Lys Glu Tyr  
 245 250 255  
 Ile Asn Gly Asp Lys Tyr Phe Gln Gln Ile Phe Asp Cys Pro Arg Leu  
 260 265 270  
 Lys Phe Ser Glu Ile Pro Gln Arg Leu Thr Ala Leu Leu Leu Pro Pro  
 275 280 285  
 Asp Pro Ile Val Ile Asn His Val Ile Ser Val Asp Pro Ser Asp Gln  
 290 295 300  
 Lys Lys Thr Ala Cys Tyr Asp Ile Asp Val Glu Val Glu Glu Pro Leu  
 305 310 315 320  
 Lys Gly Gln Met Ser Ser Phe Leu Leu Ser Thr Ala Asn Gln Gln Glu  
 325 330 335  
 Ile Ser Ala Leu Asp Ser Lys Ile His Glu Thr Ile Glu Ser Ile Asn



340                                      345                                      350  
 Gln Leu Lys Ile Gln Arg Asp Phe Met Leu Ser Phe Ser Arg Asp Pro  
 355                                      360                                      365  
 Lys Gly Tyr Val Gln Asp Leu Leu Arg Ser Gln Ser Arg Asp Leu Lys  
 370                                      375                                      380  
 Val Met Thr Asp Val Ala Gly Asn Pro Glu Glu Glu Arg Arg Ala Glu  
 385                                      390                                      395                                      400  
 Phe Tyr His Gln Pro Trp Ser Gln Glu Ala Val Ser Arg Tyr Phe Tyr  
 405                                      410                                      415  
 Cys Lys Ile Gln Gln Arg Arg Gln Glu Leu Glu Gln Ser Leu Val Val  
 420                                      425                                      430  
 Arg Asn Thr  
 435

<210> 2884

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2884

Met Ser Leu Val Ile Arg Asn Leu Gln Arg Val Ile Pro Ile Arg Arg  
 1                                      5                                      10                                      15  
 Ala Pro Leu Arg Ser Lys Ile Glu Ile Val Arg Arg Ile Leu Gly Val  
 20                                      25                                      30  
 Gln Lys Phe Asp Leu Gly Ile Ile Cys Val Asp Asn Lys Asn Ile Gln  
 35                                      40                                      45  
 His Ile Asn Arg Ile Tyr Arg Asp Arg Asn Val Pro Thr Asp Val Leu  
 50                                      55                                      60

Ser Phe Pro Phe His Glu His Leu Lys Ala Gly Glu Phe Pro Gln Pro  
 65 70 75 80  
 Asp Phe Pro Asp Asp Tyr Asn Leu Gly Asp Ile Phe Leu Gly Val Glu  
 85 90 95  
 Tyr Ile Phe His Gln Cys Lys Glu Asn Glu Asp Tyr Asn Asp Val Leu  
 100 105 110  
 Thr Val Thr Ala Thr Arg Gly Leu Cys His Leu Leu Gly Phe Thr His  
 115 120 125  
 Gly Thr Glu Ala Glu Trp Gln Gln Met Phe Gln Lys Glu Lys Ala Val  
 130 135 140  
 Leu Asp Glu Leu Gly Leu Arg Thr Gly Thr Arg Leu Gln Pro Leu Thr  
 145 150 155 160  
 Arg Gly Leu Phe Gly Gly Ser  
 165

&lt;210&gt; 2885

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2885

Met Asp Tyr Cys Ile Arg Asn Asp Asp Phe Arg Glu Gly Gln Arg Cys  
 1 5 10 15  
 Lys Phe Leu Pro Ala Gly Ser Glu Pro Pro Glu Ala Ala Gly Leu Gly  
 20 25 30  
 Leu Phe Gly Ile Pro Ser Ala Gly Leu Pro Glu Asn Val Arg Arg Pro  
 35 40 45  
 Asn Gly Ala Ala Gly Pro Gln Asp Ser Gln Asp Leu Gln Ala His Ser

50	55	60																	
Arg	Val	Ala	Cys	Gln	Arg	Arg	His	Ile	Ala	Cys	Leu	Pro	Gly	Ser	Lys				
65					70					75					80				
Phe	Gly	Gly	Cys	Gln	Trp	Glu	Asn	Cys	Gln	Glu	Pro	Pro	Ser	Leu	Pro				
				85					90					95					
Trp	Asp	Thr	Gln	Ala	Lys	Glu	Arg	Arg	Asn	Trp	Pro	Ser	Lys	Ser	Arg				
				100					105					110					
Lys	His	Lys	Ile	Thr	Ser	Ser	Gln	His	Gln	Pro	Ser	Lys	Thr	Ser	Leu				
				115					120					125					
Leu	Leu	Thr	Ser	Ser	Glu	Pro	Lys	Gly	Ala	Gly	Glu	Glu	Lys	Lys					
				130					135					140					

&lt;210&gt; 2886

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2886

Met	Ala	His	Ala	Pro	Ala	Leu	Ala	Leu	Arg	Gly	Leu	Ser	Gln	Pro	Pro				
1				5					10					15					
Gly	Thr	Cys	Pro	Ala	Val	Pro	Leu	His	Pro	Thr	Cys	Cys	Pro	Gly	Arg				
				20					25					30					
Cys	Phe	Met	Val	Thr	Cys	Asp	Trp	Leu	Ser	Asn	Asp	Gly	Leu	Ser	Trp				
				35					40					45					
Glu	Gly	Glu	Ala	Leu	Gly	Ala	Arg	Asn	Thr	Ala	Cys	Val	Gln	Gln	Leu				
				50					55					60					
Glu	Leu	Asn	Ser	Ser	Ser	Gln	Gly	Val	Trp	Arg	Gly	Thr	Cys	Cys	Thr				
				65					70					75					80

Trp Pro Pro Leu Arg Val Ala Gln Thr Pro His Tyr Pro His Val Trp  
                             85                            90                            95  
 Ser Ser Gln Ala Pro Leu Glu Gly Ala Ser Asn Lys Ser Trp Leu Gln  
                             100                            105                            110  
 Asn Glu Gln Ala Ala Gln Asp Cys Val Leu Gln Ser Pro Leu Asp Leu  
                             115                            120                            125  
 Phe Ser Gly Ala Gly His Val Gly Thr His Gly Thr Gly Lys  
                             130                            135                            140

<210> 2887

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2887

Met Val Gly Cys Trp Leu Thr Ala Ser Pro Ala Thr Arg Val Gln Glu  
     1                            5                            10                            15  
 Ile Leu Leu Pro Gln Pro Pro Glu Leu Leu Gly Leu Gln Glu Cys Ala  
                             20                            25                            30  
 Asn Met Pro Ala Gly Phe Cys Ile Phe Asn Arg Asp Gly Val Ser Pro  
                             35                            40                            45  
 Ser Asn Ser Trp Pro Arg Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala  
                             50                            55                            60  
 Gly Ile Thr Gly Met Ser His His Thr Gly Pro Ser Leu Leu Asn Tyr  
     65                            70                            75                            80  
 Tyr Leu Gly Ile Glu Lys Gly Leu Lys Leu Leu Ala Leu Ile Ser His  
                             85                            90                            95  
 Leu His Ser Ile Ile Trp Val Arg

100

&lt;210&gt; 2888

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2888

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Met Asp Ser Pro Ser Leu Arg Glu Leu Gln Gln Pro Leu Leu Glu Gly
  1             5             10             15
Thr Glu Cys Glu Thr Pro Ala Gln Lys Pro Gly Arg His Glu Leu Gly
             20             25             30
Ser Pro Leu Arg Glu Ile Ala Phe Ala Glu Ser Leu Arg Gly Leu Gln
             35             40             45
Phe Leu Ser Pro Pro Leu Pro Ser Val Ser Ala Gly Leu Gly Glu Pro
             50             55             60
Arg Pro Pro Asp Val Glu His Pro Pro Arg Gln Gln Gln Gln Phe Ser
             65             70             75             80
Ser Leu Asp Asp Lys Pro Gln Phe Pro Gly Ala Ser Ala Glu Phe Ile
             85             90             95
Asp Lys Leu Glu Phe Ile Gln Pro Asn Val Ile Ser Gly Ile Pro Ile
             100            105            110
Tyr Arg Val Met Asp Arg Gln Gly Gln Ile Ile Asn Pro Ser Glu Asp
             115            120            125
Pro His Leu Pro Lys Glu Lys Val Leu Lys Leu Tyr Lys Ser Met Thr
             130            135            140
Leu Leu Asn Thr Met Asp Arg Ile Leu Tyr Glu Ser Gln Arg Gln Gly
             145            150            155            160

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Arg Ile Ser Phe Tyr Met Thr Asn Tyr Gly Glu Glu Gly Thr His Val  
 165 170 175  
 Gly Ser Ala Ala Ala Leu Asp Asn Thr Asp Leu Val Phe Gly Gln Tyr  
 180 185 190  
 Arg Glu Ala Gly Val Leu Met Tyr Arg Asp Tyr Pro Leu Glu Leu Phe  
 195 200 205  
 Met Ala Gln Cys Tyr Gly Asn Ile Ser Asp Leu Gly Lys Gly Arg Gln  
 210 215 220  
 Met Pro Val His Tyr Gly Cys Lys Glu Arg His Phe Val Thr Ile Ser  
 225 230 235 240  
 Ser Pro Leu Ala Thr Gln Ile Pro Gln Ala Val Gly Ala Ala Tyr Ala  
 245 250 255  
 Ala Lys Arg Ala Asn Ala Asn Arg Val Val Ile Cys Tyr Phe Gly Gly  
 260 265 270  
 Gly Ala Ala Ser Glu Gly Asp Ala His Ala Gly Phe Asn Phe Ala Ala  
 275 280 285  
 Thr Leu Glu Cys Pro Ile Ile Phe Phe Cys Arg Asn Asn Gly Tyr Ala  
 290 295 300  
 Ile Ser Thr Pro Thr Ser Glu Gln Tyr Arg Gly Asp Gly Ile Ala Ala  
 305 310 315 320  
 Arg Gly Pro Gly Tyr Gly Ile Met Ser Ile Arg Val Asp Gly Asn Asp  
 325 330 335  
 Val Phe Ala Val Tyr Asn Ala Thr Lys Glu Ala Arg Arg Arg Ala Val  
 340 345 350  
 Ala Glu Asn Gln Pro Phe Leu Ile Glu Ala Met Thr Tyr Arg Ile Gly  
 355 360 365  
 His His Ser Thr Ser Asp Asp Ser Ser Ala Tyr Arg Ser Val Asp Glu  
 370 375 380  
 Val Asn Tyr Trp Asp Lys Gln Asp His Pro Ile Ser Arg Leu Arg His

385                      390                      395                      400  
 Tyr Leu Leu Ser Gln Gly Trp Trp Asp Glu Glu Gln Glu Lys Ala Trp  
                          405                      410                      415  
 Arg Lys Gln Ser Arg Arg Lys Val Met Glu Ala Phe Glu Gln Ala Glu  
                          420                      425                      430  
 Arg Lys Pro Lys Pro Asn Pro Asn Leu Leu Phe Ser Asp Val Tyr Gln  
                          435                      440                      445  
 Glu Met Pro Ala Gln Leu Arg Lys Gln Gln Glu Ser Leu Ala Arg His  
                          450                      455                      460  
 Leu Gln Thr Tyr Gly Glu His Tyr Pro Leu Asp His Phe Asp Lys  
 465                      470                      475

<210> 2889

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2889

Met Met Leu Cys Gly Asn Ala Asp His Pro Gly Thr Ile Pro Gly Asp  
     1                      5                      10                      15  
 Lys Leu Phe Ala Pro His Cys Leu Phe Leu Leu Met Leu Glu Gln Asp  
                          20                      25                      30  
 Ala Gly Gly Cys Pro Gly Met Gly Cys Gly Thr Ser Cys Tyr Leu Asn  
                          35                      40                      45  
 Thr Phe Ala Leu Asp Leu Leu Leu Ser Gly Val Val Val Cys His Gln  
                          50                      55                      60  
 Leu Ser Ser Ser Gly Ala Glu Glu Thr Ser Gly Leu Ser Ser Phe Arg  
                          65                      70                      75                      80

Ala Thr Met Asp Ile Ser Ser Met Gln Asp Trp Leu Phe Pro Ser Ala  
                             85                            90                            95  
 Leu Ser Phe Ile Cys Phe  
                             100

<210> 2890

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2890

Met His Thr His Met His Ile Tyr Thr His Ala Tyr Thr His Met His  
       1                            5                            10                            15  
 Thr Asp Thr His Thr Cys Thr His Ile His Ser His Ile His Thr Phe  
                             20                            25                            30  
 Thr Cys Thr His Ile His Arg Arg Thr Tyr Thr His Arg His Thr His  
                             35                            40                            45  
 Thr Leu Met His Thr Asn Lys Tyr Ile Tyr Thr His Met His Ile His  
                             50                            55                            60  
 Ser His Ala His Arg His Ile His Thr His Ile Cys Thr His Ala His  
       65                            70                            75                            80  
 Thr Leu Thr Tyr Thr His Ile His Thr Cys Thr Tyr Lys Arg Thr Tyr  
                             85                            90                            95  
 Ile Gln Gly His Ile His Thr His Met His Thr Tyr Thr His Ala His  
                             100                            105                            110  
 Thr His Ala His Ile His Ile His Val His Ile His Met Asn Ile His  
                             115                            120                            125  
 Thr His Thr Cys Thr His Ile Tyr Thr Cys Thr Tyr Thr Val Val Cys



130	135	140	
Thr His Thr His Met His Ile Tyr Thr His Met His Thr His Thr Cys			
145	150	155	160
Ile His Ile His Ser Asp Thr His Leu His Ile Tyr Thr His Thr Leu			
165	170	175	
Thr Cys Thr Gln Thr Gln Ile His Thr Cys Thr His Thr His Ile His			
180	185	190	
Ile His Met Pro Thr His Thr Arg Thr Tyr Thr His Met His Thr His			
195	200	205	
Thr Leu Thr Cys Thr Gln Ile His Ile Tyr Thr His Ile Tyr Met His			
210	215	220	
Ala His Thr Pro Ile His Ser His Ile His Thr Trp Thr His Thr His			
225	230	235	240
Ala His Thr Tyr Thr His Ala His Ile His Val Cys Thr His Ile His			
245	250	255	
Met His Ile His Thr Tyr Thr His Met His Thr His Met Asp Thr Tyr			
260	265	270	
Pro His Thr His Ile His Thr Cys Thr His Met His Ser His Ala His			
275	280	285	
Ile Asn Thr His Thr His Ala His Ile His Met His Met His Thr His			
290	295	300	
Thr His Thr His Thr Tyr Thr His Ala His Ala His Ile His Ile Asn			
305	310	315	320
Thr Tyr Met His Thr Tyr Thr Tyr Thr His Ile Arg Thr Tyr Thr His			
325	330	335	
Ile Gln Met His Thr Leu Thr Trp Thr His Ile His Thr His Thr His			
340	345	350	
Ile His Ile Tyr Val Tyr Thr His Thr His Met His Thr Pro Thr His			
355	360	365	

Ile Tyr Ala His Arg His Thr Tyr Thr Tyr Ala His Ser His Thr Tyr  
 370 375 380  
 Ile His Met His Thr His Ile His Thr His Ile His Thr Tyr Ile Tyr  
 385 390 395 400  
 Arg His Thr His Thr His Met Pro Cys Ala Arg Thr His Ile Pro  
 405 410 415

<210> 2891

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2891

Met Gly Thr Val Arg Pro Pro Arg Pro Ser Leu Leu Leu Val Ser Thr  
 1 5 10 15  
 Arg Glu Ser Cys Leu Phe Leu Leu Phe Cys Leu His Leu Gly Ala Ala  
 20 25 30  
 Cys Pro Gln Pro Cys Arg Cys Pro Asp His Ala Gly Ala Val Ala Val  
 35 40 45  
 Phe Cys Ser Leu Arg Gly Leu Gln Glu Val Pro Glu Asp Ile Pro Ala  
 50 55 60  
 Asn Thr Val Leu Leu Lys Leu Asp Ala Asn Lys Ile Ser His Leu Pro  
 65 70 75 80  
 Asp Gly Ala Phe Gln His Leu His Arg Leu Arg Glu Leu Asp Leu Ser  
 85 90 95  
 His Asn Ala Ile Glu Ala Ile Gly Ser Ala Thr Phe Ala Gly Leu Ala  
 100 105 110  
 Gly Gly Leu Arg Leu Leu Asp Leu Ser Tyr Asn Arg Ile Gln Arg Ile

115 120 125  
Ser Lys Asp Pro Ile Gly Pro Gly Pro  
130 135

<210> 2892

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2892

Met Pro Pro Lys Gly Lys Ser Gly Ser Gly Lys Ala Gly Lys Gly Gly  
1 5 10 15  
Ala Ala Ser Gly Ser Asp Ser Ala Asp Lys Lys Ala Gln Gly Pro Lys  
20 25 30  
Gly Gly Gly Asn Ala Val Lys Val Arg His Ile Leu Cys Glu Lys His  
35 40 45  
Gly Lys Ile Met Glu Ala Met Glu Lys Leu Lys Ser Gly Met Arg Phe  
50 55 60  
Asn Glu Val Ala Ala Gln Tyr Ser Glu Asp Lys Ala Arg Gln Gly Ile  
65 70 75 80  
Pro Ser Leu Gln Gln His Ala Gly His His Arg Asp Leu Arg Ser Thr  
85 90 95  
Leu Ile Ser Leu Val Ser Tyr Leu Gln Thr Thr Pro  
100 105

<210> 2893

<211> 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2893

Met Ala Leu Val Leu Arg Thr Arg Ala Gln Ala Val Pro Ser Gln Thr

1 5 10 15

Thr His Gln Pro Leu Gln Ser Arg Thr Arg Gly Asp Cys Leu Arg Ser

20 25 30

Thr Gly Phe Arg Ile Ile Phe Leu Gln Tyr Pro Phe Leu Trp Thr Trp

35 40 45

Leu Asn Glu Ile Tyr Lys Met Val Gln Leu Val Trp Cys Leu Leu Pro

50 55 60

Leu Pro Gly Leu Lys Leu Pro Leu Pro Cys Pro Glu Arg Leu Asp Phe

65 70 75 80

Asp Leu Leu Met Arg Ser Pro His Asn Leu Ala Phe Leu Glu Leu Leu

85 90 95

Asp Leu Cys Asn Asp Gly Cys Leu Ser Ser His His Gly Gln Ile Phe

100 105 110

His Gly Leu Cys Thr Gly Glu Val Leu Ala Ala Thr Asp Thr Ser Ser

115 120 125

Gly Gly Gly Ser Leu Gln Pro Leu Gln Gly Val Asp Leu Leu

130 135 140

&lt;210&gt; 2894

&lt;211&gt; 691

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2894

Met Asp Gly Cys Lys Lys Glu Leu Pro Arg Leu Gln Glu Pro Glu Glu

1 5 10 15

Asp Glu Asp Cys Tyr Ile Leu Asn Val Gln Ser Ser Ser Asp Asp Thr

20 25 30

Ser Gly Ser Ser Val Ala Arg Arg Ala Pro Lys Arg Gln Ala Ser Cys

35 40 45

Ile Leu Asn Val Gln Ser Arg Ser Gly Asp Thr Ser Gly Ser Ser Val

50 55 60

Ala Arg Arg Ala Pro Lys Arg Gln Ala Ser Ser Val Val Val Ile Asp

65 70 75 80

Ser Asp Ser Asp Glu Glu Cys His Thr His Glu Glu Lys Lys Ala Lys

85 90 95

Leu Leu Glu Ile Asn Ser Asp Asp Glu Ser Pro Glu Cys Cys His Val

100 105 110

Lys Pro Ala Ile Gln Glu Pro Pro Ile Val Ile Ser Asp Asp Asp Asn

115 120 125

Asp Asp Asp Asn Gly Asn Asp Leu Glu Val Pro Asp Asp Asn Ser Asp

130 135 140

Asp Ser Glu Ala Pro Asp Asp Asn Ser Asp Asp Ser Glu Ala Pro Asp

145 150 155 160

Asp Asn Ser Asp Asp Ser Glu Ala Pro Asp Asp Asn Ser Asp Asp Ser

165 170 175

Glu Ala Pro Asp Asp Asn Ser Asp Asp Ser Asp Val Pro Asp Asp Asn

180 185 190

Ser Asp Asp Ser Ser Asp Asp Asn Ser Asp Asp Ser Ser Asp Asp Asn

195 200 205

Ser Asp Asp Ser Asp Val Pro Asp Asp Lys Ser Asp Asp Ser Asp Val

210 215 220

Pro Asp Asp Ser Ser Asp Asp Ser Asp Val Pro Asp Asp Ser Ser Asp  
225 230 235 240  
Asp Ser Glu Ala Pro Asp Asp Ser Ser Asp Asp Ser Glu Ala Pro Asp  
245 250 255  
Asp Ser Ser Asp Asp Ser Glu Ala Pro Asp Asp Ser Ser Asp Asp Ser  
260 265 270  
Glu Ala Pro Asp Asp Ser Ser Asp Asp Ser Glu Ala Ser Asp Asp Ser  
275 280 285  
Ser Asp Asp Ser Glu Ala Ser Asp Asp Ser Ser Asp Asp Ser Glu Ala  
290 295 300  
Pro Asp Asp Lys Ser Asp Asp Ser Asp Val Pro Glu Asp Lys Ser Asp  
305 310 315 320  
Asp Ser Asp Val Pro Asp Asp Asn Ser Asp Asp Leu Glu Val Pro Val  
325 330 335  
Pro Ala Glu Asp Leu Cys Asn Glu Gly Gln Ile Ala Ser Asp Glu Glu  
340 345 350  
Glu Leu Val Glu Ala Ala Ala Ala Val Ser Gln His Asp Ser Ser Asp  
355 360 365  
Asp Ala Gly Glu Gln Asp Leu Gly Glu Asn Leu Ser Lys Pro Pro Ser  
370 375 380  
Asp Pro Glu Ala Asn Pro Glu Val Ser Glu Arg Lys Leu Pro Thr Glu  
385 390 395 400  
Glu Glu Pro Ala Pro Val Val Glu Gln Ser Gly Lys Arg Lys Ser Lys  
405 410 415  
Thr Lys Thr Ile Val Glu Pro Pro Arg Lys Arg Gln Thr Lys Thr Lys  
420 425 430  
Asn Ile Val Glu Pro Pro Arg Lys Arg Gln Thr Lys Thr Lys Asn Ile  
435 440 445  
Val Glu Pro Leu Arg Lys Arg Lys Ala Lys Thr Lys Asn Val Ser Val

450                      455                      460  
Thr Pro Gly His Lys Lys Arg Gly Pro Ser Lys Lys Lys Pro Gly Thr  
465                      470                      475                      480  
Ala Lys Val Glu Lys Arg Lys Thr Arg Thr Pro Lys Cys Lys Val Pro  
                    485                      490                      495  
Gly Cys Phe Leu Gln Asp Leu Glu Lys Ser Lys Lys Tyr Ser Gly Lys  
                    500                      505                      510  
Asn Leu Lys Arg Asn Lys Asp Glu Leu Val Gln Arg Ile Tyr Asp Leu  
                    515                      520                      525  
Phe Asn Arg Ser Val Cys Asp Lys Lys Leu Pro Glu Lys Leu Arg Ile  
                    530                      535                      540  
Gly Trp Asn Asn Lys Met Val Lys Thr Ala Gly Leu Cys Ser Thr Gly  
545                      550                      555                      560  
Glu Met Trp Tyr Pro Lys Trp Arg Arg Phe Ala Lys Ile Gln Ile Gly  
                    565                      570                      575  
Leu Lys Val Cys Asp Ser Ala Asp Arg Ile Arg Asp Thr Leu Ile His  
                    580                      585                      590  
Glu Met Cys His Ala Ala Ser Arg Leu Ile Asp Gly Ile His Asp Ser  
                    595                      600                      605  
His Gly Asp Ala Trp Lys Tyr Tyr Ala Arg Lys Ser Asn Arg Ile His  
                    610                      615                      620  
Pro Glu Leu Pro Arg Val Thr Arg Cys His Asn Tyr Lys Ile Asn Tyr  
625                      630                      635                      640  
Lys Val His Tyr Glu Cys Thr Gly Cys Lys Thr Arg Ile Gly Cys Tyr  
                    645                      650                      655  
Thr Lys Ser Leu Asp Thr Ser Arg Phe Ile Cys Ala Lys Cys Lys Gly  
                    660                      665                      670  
Ser Leu Val Met Val Pro Leu Thr Gln Lys Asp Gly Thr Arg Ile Val  
                    675                      680                      685

Pro His Val

690

&lt;210&gt; 2895

&lt;211&gt; 603

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2895

Met Val Lys Leu Ala Lys Ala Gly Lys Asn Gln Gly Asp Pro Lys Lys

1

5

10

15

Met Ala Pro Pro Pro Lys Glu Val Glu Glu Asp Ser Glu Asp Glu Glu

20

25

30

Met Ser Glu Asp Glu Glu Asp Asp Glu Asp Asp Asp Asp Asp Glu Glu

35

40

45

Asp Asp Ser Glu Glu Glu Ala Met Glu Thr Thr Pro Ala Lys Gly Lys

50

55

60

Lys Ala Ala Lys Val Val Pro Val Lys Ala Lys Gly Ala Lys Asn Gly

65

70

75

80

Lys Asn Ala Lys Lys Glu Asp Ser Asp Glu Glu Glu Asp Asp Asp Ser

85

90

95

Glu Glu Asp Glu Glu Asp Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu

100

105

110

Ile Glu Pro Ala Ala Met Lys Ala Ala Ala Ala Ala Pro Ala Ser Glu

115

120

125

Asp Glu Asp Asp Glu Asp Asp Glu Asp Asp Glu Asp Asp Asp Asp Asp

130

135

140

Glu Asp Asp Glu Asp Asp Asp Glu Asp Asp Glu Glu Glu Glu Glu Glu



145                      150                      155                      160  
Glu Glu Glu Glu Pro Val Lys Glu Ala Pro Gly Lys Arg Lys Lys Glu  
                         165                      170                      175  
Met Ala Lys Gln Lys Ala Ala Pro Glu Ala Lys Lys Gln Lys Val Glu  
                         180                      185                      190  
Gly Thr Glu Pro Thr Thr Ala Phe Asn Leu Phe Val Gly Asn Leu Asn  
                         195                      200                      205  
Phe Asn Lys Ser Ala Pro Glu Leu Lys Thr Gly Ile Ser Asp Val Phe  
                         210                      215                      220  
Ala Lys Asn Asp Leu Ala Val Val Asp Val Arg Ile Gly Met Thr Arg  
225                      230                      235                      240  
Lys Phe Gly Tyr Val Asp Phe Glu Ser Ala Glu Asp Leu Glu Lys Ala  
                         245                      250                      255  
Leu Glu Leu Thr Gly Leu Lys Val Phe Gly Asn Glu Ile Lys Leu Glu  
                         260                      265                      270  
Lys Pro Lys Gly Lys Asp Ser Lys Lys Glu Arg Asp Ala Arg Thr Leu  
                         275                      280                      285  
Leu Ala Lys Asn Leu Pro Tyr Lys Val Thr Gln Asp Glu Leu Lys Glu  
                         290                      295                      300  
Val Phe Glu Asp Ala Ala Glu Ile Arg Leu Val Ser Lys Asp Gly Asn  
305                      310                      315                      320  
Ser Lys Gly Ile Ala Tyr Ile Glu Phe Lys Thr Glu Ala Asp Ala Glu  
                         325                      330                      335  
Lys Thr Phe Glu Glu Lys Gln Gly Thr Glu Ile Asp Gly Arg Ser Ile  
                         340                      345                      350  
Ser Leu Tyr Tyr Thr Gly Glu Lys Gly Gln Asn Gln Asp Tyr Arg Gly  
                         355                      360                      365  
Gly Lys Asn Ser Thr Trp Ser Gly Glu Ser Lys Thr Leu Val Leu Ser  
                         370                      375                      380

Asn Leu Ser Tyr Ser Ala Thr Glu Glu Thr Leu Gln Glu Val Phe Glu  
385 390 395 400  
Lys Ala Thr Phe Ile Lys Val Pro Gln Asn Gln Asn Gly Lys Ser Lys  
405 410 415  
Gly Tyr Ala Phe Ile Glu Phe Ala Ser Phe Glu Asp Ala Lys Glu Ala  
420 425 430  
Leu Asn Ser Cys Asn Lys Arg Glu Ile Glu Gly Arg Ala Ile Arg Leu  
435 440 445  
Glu Leu Gln Gly Pro Arg Gly Ser Pro Asn Ala Arg Ser Gln Pro Ser  
450 455 460  
Lys Thr Leu Phe Val Lys Gly Leu Ser Glu Asp Thr Thr Glu Glu Thr  
465 470 475 480  
Leu Lys Glu Ser Phe Asp Gly Ser Val Arg Ala Arg Ile Val Thr Asp  
485 490 495  
Arg Glu Thr Gly Ser Ser Lys Gly Phe Gly Phe Val Asp Phe Asn Ser  
500 505 510  
Glu Glu Asp Ala Lys Ala Ala Lys Glu Ala Met Glu Asp Gly Glu Ile  
515 520 525  
Asp Gly Asn Lys Val Thr Leu Asp Trp Ala Lys Pro Lys Gly Glu Gly  
530 535 540  
Gly Phe Gly Gly Arg Gly Gly Gly Arg Gly Gly Phe Gly Gly Arg Gly  
545 550 555 560  
Gly Gly Arg Gly Gly Arg Gly Gly Phe Gly Gly Arg Gly Arg Gly Gly  
565 570 575  
Phe Gly Gly Arg Gly Gly Phe Arg Gly Gly Arg Gly Gly Gly Asp  
580 585 590  
His Lys Pro Gln Gly Lys Lys Thr Lys Phe Glu  
595 600

&lt;210&gt; 2896

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2896

Met Ser Gln Pro Lys Arg Arg Gln Pro Trp Ala Ala Gly Ala Trp Ser  
1 5 10 15  
Pro Arg Ala Gln Gly His Ser Ala Leu Val Thr Val Pro His Leu Glu  
20 25 30  
Asn Gly Cys Asn Asn Lys Thr Val His Gly Arg Trp Gln Asp Gln Thr  
35 40 45  
His Arg Lys Leu Cys Arg Ala Gly Ser Phe Cys Ala His Thr Val Gln  
50 55 60  
Gln Trp Ala Pro Gly Thr Trp Pro Glu Arg Ser Arg Ala Met Arg Lys  
65 70 75 80  
Gly Trp Leu Leu Glu Thr Tyr Thr Arg Pro Ser Leu Gly Gly Phe Gly  
85 90 95  
Trp Arg Ser Leu Ala Cys Glu Val Gly Arg Ala Thr Phe Tyr  
100 105 110

&lt;210&gt; 2897

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

Met Ala Gly Met Met Val Gly Gly Asn Leu Tyr Gly His Leu Ser Asp  
 1 5 10 15  
 Arg Phe Gly Arg Lys Phe Val Leu Arg Trp Ser Tyr Leu Gln Leu Ala  
 20 25 30  
 Ile Val Gly Thr Cys Ala Ala Phe Ala Pro Thr Ile Leu Val Tyr Cys  
 35 40 45  
 Ser Leu Arg Phe Leu Ala Gly Ala Ala Thr Phe Ser Ile Ile Val Asn  
 50 55 60  
 Thr Val Leu Leu Ile Val Glu Trp Ile Thr His Gln Phe Cys Ala Met  
 65 70 75 80  
 Ala Leu Thr Leu Thr Leu Cys Ala Ala Ser Ile Gly His Ile Thr Leu  
 85 90 95  
 Gly Ser Leu Ala Phe Val Ile Arg Asp Gln Cys Ile Leu Gln Leu Val  
 100 105 110  
 Met Ser Ala Pro Cys Phe Val Phe Phe Leu Phe Ser Arg Trp Leu Ala  
 115 120 125  
 Glu Ser Ala Arg Trp Leu Ile Ile Asn Asn Lys Pro Glu Glu Gly Leu  
 130 135 140  
 Lys Glu Leu Arg Lys Ala Ala His Arg Asn Gly Met Lys Asn Ala Glu  
 145 150 155 160  
 Asp Ile Leu Thr Met Glu Val Leu Lys Ser Thr Met Lys Gln Glu Leu  
 165 170 175  
 Glu Ala Ala Gln Lys Lys His Ser Leu Cys Glu Leu Leu Arg Ile Pro  
 180 185 190  
 Asn Ile Cys Lys Arg Ile Cys Phe Leu Ser Phe Val Arg Ser Ala Gly  
 195 200 205  
 Val Cys Trp Arg Ser Thr Pro Asp Pro Val Cys Leu Gly Ile Thr Ser  
 210 215 220  
 Gly Gly Cys Arg Thr Ala Lys Thr Pro Ala Cys Ser Phe Leu Trp Lys

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Thr Val Asn Leu Ser Leu Asp Leu Thr His Asn Asn Gly Lys Phe Asn  
 145 150 155 160  
 Asn Asp Ser His Ser Pro Lys Val Ser Ser Gln Asn Arg Thr Arg Ser  
 165 170 175  
 Phe Gly His Phe Pro Gly Pro Glu Phe Leu Asp Val Glu Lys Thr Ser  
 180 185 190  
 Phe Ser Gln Glu Gln Ser Cys Asp Ser Ala Gly Glu Gly Ser Glu Arg  
 195 200 205  
 Ile His Gln Asp Ser Glu Ser Gly Asp Glu Leu Ser Ser Ser Ser Thr  
 210 215 220  
 Glu Gln Ile Arg Ala Thr Thr Pro Pro Asn Gln Gly Arg Pro Asp Ser  
 225 230 235 240  
 Pro Val Tyr Ala Asn Leu Gln Glu Leu Lys Ile Ser Gln Ser Ala Leu  
 245 250 255  
 Pro Pro Leu Pro Gly Ser Pro Ala Ile Gln Ile Asn Gly Glu Trp Glu  
 260 265 270  
 Thr His Lys Asp Ser Ser Gly Arg Cys Tyr Tyr Tyr Asn Arg Gly Thr  
 275 280 285  
 Gln Glu Arg Thr Trp Lys Pro Pro Arg Trp Thr Arg Asp Ala Ser Ile  
 290 295 300  
 Ser Glu Gly Asp Phe Gln Asn Pro Gly Asp Gln Glu Leu Leu Ser Ser  
 305 310 315 320  
 Glu Glu Asn Tyr Tyr Ser Thr Ser Tyr Ser Gln Ser Asp Ser Gln Cys  
 325 330 335  
 Gly Ser Pro Pro Arg Gly Trp Ser Glu Glu Leu Asp Glu Arg Gly His  
 340 345 350  
 Thr Leu Tyr Thr Ser Asp Tyr Thr Asn Glu Lys Trp Leu Lys His Val  
 355 360 365  
 Asp Asp Gln Gly Arg Gln Tyr Tyr Tyr Ser Ala Asp Gly Ser Arg Ser

370 375 380  
Glu Trp Glu Leu Pro Lys Tyr Asn Ala Ser Ser Gln Gln Gln Arg Glu  
385 390 395 400  
Ile Ile Lys Ser Arg Ser Leu Asp Arg Arg Leu Gln Glu Pro Ile Val  
405 410 415  
Leu Thr Lys Trp Arg His Ser Thr Ile Val Leu Asp Thr Asn Asp Lys  
420 425 430  
Glu Ser Pro Thr Ala Ser Lys Pro Cys Phe Pro Glu Asn Glu Ser Ser  
435 440 445  
Pro Ser Ser Pro Lys His Gln Asp Thr Ala Ser Ser Pro Lys Asp Gln  
450 455 460  
Glu Lys Tyr Gly Leu Leu Asn Val Thr Lys Ile Ala Glu Asn Gly Lys  
465 470 475 480  
Lys Val Arg Lys Asn Trp Leu Ser Ser Trp Ala Val Leu Gln Gly Ser  
485 490 495  
Ser Leu Leu Phe Thr Lys Thr Gln Gly Ser Ser Thr Ser Trp Phe Gly  
500 505 510  
Ser Asn Gln Ser Lys Pro Glu Phe Thr Val Asp Leu Lys Gly Ala Thr  
515 520 525  
Ile Glu Met Ala Ser Lys Asp Lys Ser Ser Lys Lys Asn Val Phe Glu  
530 535 540  
Leu Lys Thr Arg Gln Gly Thr Glu Leu Leu Ile Gln Ser Asp Asn Asp  
545 550 555 560  
Thr Val Ile Asn Asp Trp Phe Lys Val Leu Ser Ser Thr Ile Asn Asn  
565 570 575  
Gln Ala Val Glu Thr Asp Glu Gly Ile Glu Glu Glu Ile Pro Asp Ser  
580 585 590  
Pro Gly Ile Glu Lys His Asp  
595

&lt;210&gt; 2899

&lt;211&gt; 773

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2899

Met Ser Tyr Leu Ala Ala Val Glu Glu Glu Val Glu Glu Ser Ser Val

1 5 10 15

Lys Ser Asp Asn Gly Asp Glu Lys Ala Glu Pro Ser Pro Gln Ser Trp

20 25 30

Ser Ser Leu Trp Lys His Asp Lys Asp Met Glu Glu Asp Arg Ala Ser

35 40 45

Ser Ser Ser Gly Thr Ile Val Gln Glu Ala Tyr Gly Lys Ile Ser Thr

50 55 60

Ser Asp Asn Ser Met Ala Gln Ile Leu Thr Pro Asp Ser Leu Asn Thr

65 70 75 80

Glu Gln Gly Pro Glu Cys Ser Leu Arg Pro Asn Gln Thr Glu Glu Gly

85 90 95

Thr Thr Pro Pro Ile Glu Ala Asp Thr Leu Asp Ser Ser Asp Ala Gln

100 105 110

Gly Gly Leu Glu Pro Arg Val Glu Lys Thr Arg Pro Glu Pro Thr Glu

115 120 125

Val Leu His Ala Cys Lys Thr Gln Val Ala Glu Leu Glu Leu Trp Leu

130 135 140

Gln Gln Ala Asn Val Ala Val Glu Pro Glu Thr Leu Asn Ala Asp Met

145 150 155 160

Gln Gln Val Leu Glu Gln Gln Leu Val Gly Cys Gln Ala Met Leu Thr



165	170	175
Glu Ile Glu His Lys Val Ala Phe Leu Leu Glu Thr Cys Lys Asp Gln		
180	185	190
Gly Leu Gly Asp Asn Gly Ala Thr Gln His Glu Ala Glu Ala Leu Ser		
195	200	205
Leu Lys Leu Lys Thr Val Lys Cys Asn Leu Glu Lys Val Gln Met Met		
210	215	220
Leu Gln Glu Lys His Ser Glu Asp Gln His Pro Thr Ile Leu Lys Lys		
225	230	235
240		
Ser Ser Glu Pro Glu His Gln Glu Ala Leu Gln Pro Val Asn Leu Ser		
245	250	255
Glu Leu Glu Ser Ile Val Thr Glu Arg Pro Gln Phe Ser Arg Gln Lys		
260	265	270
Asp Phe Gln Gln Gln Gln Val Leu Glu Leu Lys Pro Met Glu Gln Lys		
275	280	285
Asp Phe Ile Lys Phe Ile Glu Phe Asn Ala Lys Lys Met Trp Pro Gln		
290	295	300
Tyr Cys Gln His Asp Asn Asp Thr Thr Gln Glu Ser Ser Ala Ser Asn		
305	310	315
320		
Gln Ala Ser Ser Pro Glu Asn Asp Val Pro Asp Ser Ile Leu Ser Pro		
325	330	335
Gln Gly Gln Asn Gly Asp Lys Trp Gln Tyr Leu His His Glu Leu Ser		
340	345	350
Ser Lys Ile Lys Leu Pro Leu Pro Gln Leu Val Glu Pro Gln Val Ser		
355	360	365
Thr Asn Met Gly Ile Leu Pro Ser Val Thr Met Tyr Asn Phe Arg Tyr		
370	375	380
Pro Thr Thr Glu Glu Leu Lys Thr Tyr Thr Thr Gln Leu Glu Asp Leu		
385	390	395
400		

Arg Gln Glu Ala Ser Asn Leu Gln Thr Gln Glu Asn Met Thr Glu Glu			
405	410	415	
Ala Tyr Ile Asn Leu Asp Lys Lys Leu Phe Glu Leu Phe Leu Thr Leu			
420	425	430	
Ser Gln Cys Leu Ser Ser Val Glu Glu Met Leu Glu Met Pro Arg Leu			
435	440	445	
Tyr Arg Glu Asp Gly Ser Gly Gln Gln Val His Tyr Glu Thr Leu Ala			
450	455	460	
Leu Glu Leu Lys Lys Leu Tyr Leu Ala Leu Ser Asp Lys Lys Gly Asp			
465	470	475	480
Leu Leu Lys Ala Met Thr Trp Pro Gly Glu Asn Thr Asn Leu Leu Leu			
485	490	495	
Glu Cys Phe Asp Asn Leu Gln Val Cys Leu Glu His Thr Gln Ala Ala			
500	505	510	
Ala Val Cys Arg Ser Lys Ser Leu Lys Ala Gly Leu Asp Tyr Asn Arg			
515	520	525	
Ser Tyr Gln Asn Glu Ile Lys Arg Leu Tyr His Gln Leu Ile Lys Ser			
530	535	540	
Lys Thr Ser Leu Gln Gln Ser Leu Asn Glu Ile Ser Gly Gln Ser Val			
545	550	555	560
Ala Glu Gln Leu Gln Lys Ala Asp Ala Tyr Thr Val Glu Leu Glu Asn			
565	570	575	
Ala Glu Ser Arg Val Ala Lys Leu Arg Asp Glu Gly Glu Arg Leu His			
580	585	590	
Leu Pro Tyr Ala Leu Leu Gln Glu Val Tyr Lys Leu Glu Asp Val Leu			
595	600	605	
Asp Ser Met Trp Gly Met Leu Arg Ala Arg Tyr Thr Glu Leu Ser Ser			
610	615	620	
Pro Phe Val Thr Glu Ser Gln Gln Asp Ala Leu Leu Gln Gly Met Val			

625                      630                      635                      640  
Glu Leu Val Lys Ile Gly Lys Glu Lys Leu Ala His Gly His Leu Lys  
                         645                      650                      655  
Gln Thr Lys Ser Lys Val Ala Leu Gln Ala Gln Ile Glu Asn His Lys  
                         660                      665                      670  
Val Phe Phe Gln Lys Leu Val Ala Asp Met Leu Leu Ile Gln Ala Tyr  
                         675                      680                      685  
Ser Ala Lys Ile Leu Pro Ser Leu Leu Gln Asn Arg Glu Thr Phe Trp  
                         690                      695                      700  
Ala Glu Gln Val Thr Glu Val Lys Ile Leu Glu Glu Lys Ser Arg Gln  
705                      710                      715                      720  
Cys Gly Met Lys Leu Gln Ser Leu Leu Gln Lys Trp Glu Glu Phe Asp  
                         725                      730                      735  
Glu Asn Tyr Ala Ser Leu Glu Lys Asp Leu Asn Ser Tyr Ile Tyr Ile  
                         740                      745                      750  
Ala Leu Cys Glu Phe Gly Gly Arg Asn Arg Gly Lys Ile Ser Gly Lys  
                         755                      760                      765  
Asp Phe Ile Leu Pro  
                         770

&lt;210&gt; 2900

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2900

Met Asp Phe Ile Phe Ser Lys Val Trp Arg Met Cys Thr Ile Thr Asp

1

5

10

15

Leu Tyr Val Ile Phe Val Val Leu Ile His Leu Leu Gln Phe Arg Ile  
                     20                    25                    30  
 Phe Phe Phe Phe Phe Phe Glu Thr Glu Ser Cys Ser Val Thr Gln Val  
                     35                    40                    45  
 Gly Val Gln Trp Cys Asn Leu Gly Leu Leu Gln Pro Leu Pro Pro Gly  
                     50                    55                    60  
 Phe Lys Arg Phe Ser Cys Pro Asn Leu Pro Ser Ser Trp Asp Arg Arg  
                     65                    70                    75                    80  
 Tyr Val Pro Pro Tyr Leu Ala Asn Phe Cys Ile Phe Ser Arg Asp Arg  
                                     85                                    90                                    95  
 Val His Val Ser Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp Pro  
                     100                    105                    110  
 Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys  
                     115                    120                    125  
 Ala Arg Pro Thr Ile Gln Lys Phe Lys  
                     130                    135

&lt;210&gt; 2901

&lt;211&gt; 329

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

Met Arg Pro Pro Pro Ala Leu Ala Leu Ala Gly Leu Cys Leu Leu Ala  
                     1                    5                    10                    15  
 Leu Pro Ala Ala Ala Ala Ser Tyr Phe Gly Leu Thr Gly Arg Glu Val  
                     20                    25                    30  
 Leu Thr Pro Phe Pro Gly Leu Gly Thr Ala Ala Ala Pro Ala Gln Gly

35	40	45
Gly Ala His Leu Lys Gln Cys Asp Leu Leu Lys Leu Ser Arg Arg Gln		
50	55	60
Lys Gln Leu Cys Arg Arg Glu Pro Gly Leu Ala Glu Thr Leu Arg Asp		
65	70	75
Ala Ala His Leu Gly Leu Leu Glu Cys Gln Phe Gln Phe Arg His Glu		
85	90	95
Arg Trp Asn Cys Ser Leu Glu Gly Arg Thr Gly Leu Leu Lys Arg Gly		
100	105	110
Phe Lys Glu Thr Ala Phe Leu Tyr Ala Val Ser Ser Ala Ala Leu Thr		
115	120	125
His Thr Leu Ala Arg Ala Cys Ser Ala Gly Arg Met Glu Arg Cys Thr		
130	135	140
Cys Asp Asp Ser Pro Gly Leu Glu Ser Arg Gln Ala Trp Gln Trp Gly		
145	150	155
Val Cys Gly Asp Asn Leu Lys Tyr Ser Thr Lys Phe Leu Ser Asn Phe		
165	170	175
Leu Gly Ser Lys Arg Gly Asn Lys Asp Leu Arg Ala Arg Ala Asp Ala		
180	185	190
His Asn Thr His Val Gly Ile Lys Ala Val Lys Ser Gly Leu Arg Thr		
195	200	205
Thr Cys Lys Cys His Gly Val Ser Gly Ser Cys Ala Val Arg Thr Cys		
210	215	220
Trp Lys Gln Leu Ser Pro Phe Arg Glu Thr Gly Gln Val Leu Lys Leu		
225	230	235
Arg Tyr Asp Ser Ala Val Lys Val Ser Ser Ala Thr Asn Glu Ala Leu		
245	250	255
Gly Arg Leu Glu Leu Trp Ala Pro Ala Arg Gln Gly Ser Leu Thr Lys		
260	265	270

Gly Leu Ala Pro Arg Ser Gly Asp Leu Val Tyr Met Glu Asp Ser Pro  
 275 280 285  
 Ser Phe Cys Arg Pro Ser Lys Tyr Ser Pro Gly Thr Ala Gly Trp Ser  
 290 295 300  
 Ala Val Ala Arg Ser Gln Leu Ile Thr Thr Ser Thr Ser Arg Ile Gln  
 305 310 315 320  
 Ala Ile Leu Pro Ser Gln Leu Pro Glu  
 325

<210> 2902

<211> 413

<212> PRT

<213> Homo sapiens

<400> 2902

Met Arg Gln Arg Ala Asp Arg Arg Ser Met Val Ser Thr Ser Gly Ala  
 1 5 10 15  
 Ala Thr Ala Ser Ser Ala Ala Gly Pro Ser Arg Gly Ala Ala His Ser  
 20 25 30  
 Pro Ser Ser Ala Pro His Ala Ser Arg His Arg Pro Pro Phe Ser Ser  
 35 40 45  
 Arg Ala Thr Gly Leu Leu Gln Gln Arg Gln His Cys Val His His Cys  
 50 55 60  
 Thr Gln Leu Cys Pro Arg Val Gln Thr Pro Cys Leu Pro Pro Pro Pro  
 65 70 75 80  
 Ala Pro Ala Thr Glu Leu His Ser Tyr Leu Gln Gln Gly Gly Glu Arg  
 85 90 95  
 Gly Leu Leu Asp Thr Thr Pro Gly Thr Ala Gly Trp Gly Thr Ser Ala

100	105	110
Thr Gly Ala Val Gln Gly Ser Arg Pro Gly Lys Asn Val Gln Leu Thr		
115	120	125
Glu Asn Glu Ile Arg Gly Leu Cys Leu Lys Ser Arg Glu Ile Phe Leu		
130	135	140
Ser Gln Pro Ile Leu Leu Glu Leu Glu Ala Pro Leu Lys Ile Cys Gly		
145	150	155
Asp Ile His Gly Gln Tyr Tyr Asp Leu Leu Arg Leu Phe Glu Tyr Gly		
165	170	175
Gly Phe Pro Pro Glu Ser Asn Tyr Leu Phe Leu Gly Asp Tyr Val Asp		
180	185	190
Arg Gly Lys Gln Ser Leu Glu Thr Ile Cys Leu Leu Leu Ala Tyr Lys		
195	200	205
Ile Lys Tyr Pro Glu Asn Phe Phe Leu Leu Arg Gly Asn His Glu Cys		
210	215	220
Ala Ser Ile Asn Arg Ile Tyr Gly Phe Tyr Asp Glu Cys Lys Arg Arg		
225	230	235
Tyr Asn Ile Lys Leu Trp Lys Thr Phe Thr Asp Cys Phe Asn Cys Leu		
245	250	255
Pro Ile Ala Ala Ile Val Asp Glu Lys Ile Phe Cys Cys His Gly Gly		
260	265	270
Leu Ser Pro Asp Leu Gln Ser Met Glu Gln Ile Arg Arg Ile Met Arg		
275	280	285
Pro Thr Asp Val Pro Asp Gln Gly Leu Leu Cys Asp Leu Leu Trp Ser		
290	295	300
Asp Pro Asp Lys Asp Val Gln Gly Trp Gly Glu Asn Asp Arg Gly Val		
305	310	315
Ser Phe Thr Phe Gly Ala Glu Val Val Ala Lys Phe Leu His Lys His		
325	330	335

Asp Leu Asp Leu Ile Cys Arg Ala His Gln Val Val Glu Asp Gly Tyr  
                   340                                  345                                  350  
 Glu Phe Phe Ala Lys Arg Gln Leu Val Ala Leu Phe Ser Ala Pro Asn  
                   355                                  360                                  365  
 Tyr Cys Gly Glu Phe Asp Asn Ala Gly Ala Met Met Ser Val Asp Glu  
                   370                                  375                                  380  
 Thr Leu Met Cys Ser Phe Gln Ile Leu Lys Pro Ala Asp Lys Asn Lys  
                   385                                  390                                  395                                  400  
 Gly Lys Tyr Gly Gln Phe Ser Gly Leu Asn Pro Gly Gly  
                                   405                                  410

<210> 2903

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2903

Met Asp Pro Val Thr Gln Leu Tyr Thr Met Thr Ser Thr Leu Glu Tyr  
           1                                  5                                  10                                  15  
 Lys Thr Thr Lys Ala Asp Ile Gln Met Pro Phe Thr Cys Ser Val Thr  
                                   20                                  25                                  30  
 Tyr Tyr Gly Pro Ser Gly Gln Lys Thr Ile His Ser Glu Gln Ala Val  
                   35                                  40                                  45  
 Phe Asp Ile Tyr Tyr Leu Asp Leu Ser Leu Asn Pro Ser Gly Glu Val  
           50                                  55                                  60  
 Thr Arg Gln Ile Gly Asp Ala Leu Pro Val Ser Cys Thr Ile Ser Ala  
           65                                  70                                  75                                  80  
 Ser Arg Asn Ala Thr Val Val Trp Met Lys Asp Asn Ile Arg Leu Arg



	85	90	95
Ser Ser Pro Ser Phe Ser Ser Leu His Tyr Gln Asp Ala Gly Asn Tyr			
100	105	110	
Val Cys Glu Thr Ala Leu Gln Glu Val Glu Gly Leu Lys Lys Arg Glu			
115	120	125	
Ser Leu Thr Leu Ile Val Glu Gly Lys Pro Gln Ile Lys Met Thr Lys			
130	135	140	
Lys Thr Asp Pro Ser Gly Leu Ser Lys Thr Ile Ile Cys His Val Glu			
145	150	155	160
Gly Phe Pro Lys Pro Ala Ile Gln Trp Thr Ile Thr Gly Ser Gly Ser			
165	170	175	
Val Ile Asn Gln Thr Glu Glu Ser Pro Tyr Ile Asn Gly Arg Tyr Tyr			
180	185	190	
Ser Lys Ile Ile Ile Ser Pro Glu Glu Asn Val Thr Leu Thr Cys Thr			
195	200	205	
Ala Glu Asn Gln Leu Glu Arg Thr Val Asn Ser Leu Asn Val Ser Ala			
210	215	220	
Ile Ser Ile Pro Glu His Asp Glu Ala Asp Glu Ile Ser Asp Glu Asn			
225	230	235	240
Arg Glu Lys Val Asn Asp Gln Ala Lys Leu Ile Val Gly Ile Val Val			
245	250	255	
Gly Leu Leu Leu Ala Ala Leu Val Ala Gly Val Val Tyr Trp Leu Tyr			
260	265	270	
Met Lys Lys Ser Lys Thr Ala Ser Lys His Val Asn Lys Asp Leu Gly			
275	280	285	
Asn Met Glu Glu Asn Lys Lys Leu Glu Glu Asn Asn His Lys Thr Glu			
290	295	300	
Ala			
305			

&lt;210&gt; 2904

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2904

Met Gly Leu Cys Thr Leu Gln Pro Leu Gly Pro Pro Arg Lys Ser Ser  
 1 5 10 15  
 Thr Ser Cys Gly Thr Trp Thr Ala Ser Gly Leu Pro Ser Leu Gly His  
 20 25 30  
 Leu Pro Arg Arg Leu Arg Leu Ala Phe Asp Phe Leu Glu Pro Arg Ala  
 35 40 45  
 Arg Gly Gln Arg Gly Gly Ser Gly Gly Cys Gln Ser Thr Arg Ala Ala  
 50 55 60  
 Glu Arg Thr Arg Pro Pro His Pro Pro Asn Ala Val Leu Leu Leu Gln  
 65 70 75 80  
 Pro Glu Pro Ser Leu Thr Trp Ala Gln Gly Arg Gly Cys Arg Gly His  
 85 90 95  
 Phe Arg Ser Leu Pro Ala Ala Ala Ser Arg Ser Gly Ser Arg Thr Leu  
 100 105 110  
 Arg Cys Ala Ser Ser Asp Arg Ser Leu Arg Glu Gln Lys Gln Arg Arg  
 115 120 125  
 Ala Gly Pro Asp Pro Thr Pro Ser Pro Ala Pro Pro Pro Ala Gly Pro  
 130 135 140  
 Arg Pro Ser Pro Gly Ser Leu Gly Pro Ser Ala Pro Ala Ala Pro Arg  
 145 150 155 160  
 Thr Ala Arg Gly Ala Tyr Glu Leu Gln Gly Gly Ala Ser Gln Asp Gly

	165		170		175										
Pro	Gly	Gln	Ala	Ala	Val	Gly	Ala	Thr	Pro	Thr	Thr	Gly	Pro	Gly	Thr
	180		185		190										
Gly	Gly	Glu	Gly	Ala	Leu	Leu	Gly	Cys	Gly	Ser	Gly	Arg	Thr	Pro	Pro
	195		200		205										
Thr	Ser	Ala	Thr	Trp	Arg	Arg	Arg	Leu	Leu	Pro	Ala	Glu	Val	Pro	Pro
	210		215		220										
Gly	Ala	Ala	Ala	Ala	Asn	Phe	Pro	Glu	Arg	Glu	Arg	Leu			
225			230		235										

&lt;210&gt; 2905

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2905

Met	Ala	Glu	Lys	Gln	Leu	Arg	Cys	Trp	Gly	Ile	Gln	Ala	Pro	Arg	Ala
1			5						10					15	
Glu	Gly	Lys	Phe	Thr	Gly	Ala	His	Cys	Met	Gln	Gly	Leu	Ser	Gly	Gln
			20						25					30	
Arg	Cys	Leu	Gly	Leu	Val	Phe	Arg	Glu	Leu	Leu	Ala	Glu	Ser	Pro	Val
			35						40					45	
Trp	Pro	Asn	Gln	Asp	Ala	Gly	Lys	Asn	Arg	Gln	Val	Cys	Pro	Trp	Met
			50						55					60	
Lys	Pro	Ser	Thr	Ile	Tyr	Gln	Pro	Leu	Lys	Gln	Ile	Leu	Arg	Glu	Glu
			65						70					75	
Leu	Val	Ser	Leu	Thr	Ile	Met	Leu	Leu	Leu	Val	Met	Met	Ile	Met	Met
									85					90	
															95

Leu Thr Ile Lys Lys Ile Ile Asn Cys Phe Pro Ser Phe Ser His Ile  
                   100                          105                          110  
 Glu Lys Ile Thr Thr Trp Gln Asp Pro Arg Lys Ala Met Asn Gln Pro  
                   115                          120                          125  
 Leu Asn His Met Asn Leu His Pro Ala Val Ser Ser Thr Pro Val Pro  
                   130                          135                          140  
 Gln Arg Ser Met Ala Val Ser Gln Pro Asn Leu Gly Lys Pro Gln Ala  
                   145                          150                          155                          160  
 Phe Phe Lys Ile Lys Lys Asp Ile Phe Phe Leu  
                                   165                                  170

<210> 2906

<211> 211

<212> PRT

<213> Homo sapiens

<400> 2906

Met Val Ala His Asn Gln Val Ala Ala Asp Asn Ala Val Ser Thr Ala  
           1                          5                          10                          15  
 Ala Glu Pro Arg Arg Arg Pro Glu Pro Ser Ser Ser Ser Ser Ser Ser  
                           20                          25                          30  
 Pro Ala Ala Pro Ala Arg Pro Arg Pro Cys Pro Ala Val Pro Ala Pro  
                   35                          40                          45  
 Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser His Ala Asp Tyr  
           50                          55                          60  
 Arg Arg Ile Thr Arg Ala Ser Ala Leu Leu Asp Ala Cys Gly Phe Tyr  
           65                          70                          75                          80  
 Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg Leu Arg Ala Glu

	85		90		95
Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys Phe					
	100		105		110
Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg Val					
	115		120		125
His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Ser Phe					
	130		135		140
Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg Arg					
	145		150		155
					160
Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln Glu					
	165		170		175
Leu Cys Arg Gln Arg Ile Val Ala Thr Val Gly Arg Glu Asn Leu Ala					
	180		185		190
Arg Ile Pro Leu Asn Pro Val Leu Arg Asp Tyr Leu Ser Ser Phe Pro					
	195		200		205
Phe Gln Ile					
	210				

&lt;210&gt; 2907

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2907

Met Cys Met Asn Thr Ser Ile His Ala His Thr Tyr Ala Arg Thr His				
1	5	10	15	
Thr His Ser Val Phe Met Ser Ser Asn Val Thr Val Phe Gln Trp Met				
20	25	30		

Arg Leu Met Arg Ala Ser Ser Arg Ser Phe Thr Gln Ala Ile Pro Ala  
 35 40 45  
 Gly Gln Leu Leu Gln Thr Ala Cys Ser His Leu Phe Thr Thr Gln Asn  
 50 55 60  
 Thr Cys Gln Asn Ala Leu Gly Asn Asn Thr Arg Leu Gln His Thr Glu  
 65 70 75 80  
 Lys Val Arg Leu Ser Ile Gly Leu Ala Asp Phe Gly Leu Pro Gly Ile  
 85 90 95  
 Ala Arg Asn Thr Phe Val Val Pro Asp Ser Ile Ser Arg Tyr Cys Arg  
 100 105 110  
 Glu Gly Ser Val Ile Gly Lys Cys Cys Pro Ser Arg Lys Ser Ala Leu  
 115 120 125  
 Leu Asn Lys Gln Gly Ser Leu Lys Lys Phe Lys Ile Thr Arg Gly Glu  
 130 135 140  
 Thr Gln Pro Ser Val Thr Ile Ser Val Leu Glu Leu Ala Glu Ile Asp  
 145 150 155 160  
 Gln Arg Phe

&lt;210&gt; 2908

&lt;211&gt; 604

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2908

Met Ala Ser Thr Asp Tyr Ser Thr Tyr Ser Gln Ala Ala Ala Gln Gln  
 1 5 10 15  
 Gly Tyr Ser Ala Tyr Thr Ala Gln Pro Thr Gln Gly Tyr Ala Gln Thr

20	25	30
Thr Gln Ala Tyr Gly Gln Gln Ser Tyr Gly Thr Tyr Gly Gln Pro Thr		
35	40	45
Asp Val Ser Tyr Thr Gln Ala Gln Thr Thr Ala Thr Tyr Gly Gln Thr		
50	55	60
Ala Tyr Ala Thr Ser Tyr Gly Gln Pro Pro Thr Gly Tyr Thr Thr Pro		
65	70	75
Ser Tyr Pro Pro Thr Ser Tyr Ser Ser Thr Gln Pro Thr Ser Tyr Asp		
85	90	95
Gln Ser Ser Tyr Ser Gln Gln Pro Ala Ala Thr Ala Pro Thr Arg Pro		
100	105	110
Gln Asp Gly Asn Lys Pro Thr Glu Thr Ser Gln Pro Gln Ser Ser Thr		
115	120	125
Gly Gly Tyr Asn Gln Pro Ser Leu Gly Tyr Gly Gln Ser Asn Tyr Ser		
130	135	140
Tyr Pro Gln Val Pro Gly Ser Tyr Pro Met Gln Pro Val Thr Ala Pro		
145	150	155
Pro Ser Tyr Pro Pro Thr Ser Tyr Gly Gln Gln Ser Ser Tyr Gly Gln		
165	170	175
Gln Ser Ser Tyr Gly Gln Gln Pro Pro Thr Ser Tyr Pro Pro Gln Thr		
180	185	190
Gly Ser Tyr Ser Gln Ala Pro Ser Gln Tyr Ser Gln Gln Ser Ser Ser		
195	200	205
Tyr Gly Gln Gln Ser Ser Phe Arg Gln Asp His Pro Ser Ser Met Gly		
210	215	220
Val Tyr Gly Gln Glu Ser Gly Gly Phe Ser Gly Pro Gly Glu Asn Arg		
225	230	235
Ser Met Ser Gly Pro Asp Asn Arg Gly Arg Gly Arg Gly Gly Phe Asp		
245	250	255

Arg Gly Gly Met Ser Arg Gly Gly Arg Gly Gly Gly Arg Gly Gly Met  
 260 265 270  
 Gly Ser Ala Gly Glu Arg Gly Gly Phe Asn Lys Pro Gly Gly Pro Met  
 275 280 285  
 Asp Glu Gly Pro Asp Leu Asp Leu Gly Pro Pro Val Asp Pro Asp Glu  
 290 295 300  
 Asp Ser Asp Asn Ser Ala Ile Tyr Val Gln Gly Leu Asn Asp Ser Val  
 305 310 315 320  
 Thr Leu Asp Asp Leu Ala Asp Phe Phe Lys Gln Cys Gly Val Val Lys  
 325 330 335  
 Met Asn Lys Arg Thr Gly Gln Pro Met Ile His Ile Tyr Leu Asp Lys  
 340 345 350  
 Glu Thr Gly Lys Pro Lys Gly Asp Ala Thr Val Ser Tyr Glu Asp Pro  
 355 360 365  
 Pro Thr Ala Lys Ala Ala Val Glu Trp Phe Asp Gly Lys Asp Phe Gln  
 370 375 380  
 Gly Ser Lys Leu Lys Val Ser Leu Ala Arg Lys Lys Pro Pro Met Asn  
 385 390 395 400  
 Ser Met Arg Gly Gly Leu Pro Pro Arg Glu Gly Arg Gly Met Pro Pro  
 405 410 415  
 Pro Leu Arg Gly Gly Pro Gly Gly Pro Gly Gly Pro Gly Gly Pro Met  
 420 425 430  
 Gly Arg Met Gly Gly Arg Gly Gly Asp Arg Gly Gly Phe Pro Pro Arg  
 435 440 445  
 Gly Pro Arg Gly Ser Arg Gly Asn Pro Ser Gly Gly Gly Asn Val Gln  
 450 455 460  
 His Arg Ala Gly Asp Leu Gln Cys Pro Asn Pro Gly Cys Gly Asn Gln  
 465 470 475 480  
 Asn Phe Ala Trp Arg Thr Glu Cys Asn Gln Cys Lys Ala Pro Lys Pro



<210> 2909

<211> 662

<212> PRT

<213> Homo sapiens

<400> 2909

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Ala Ser Ser Val Cys Thr Val Trp Thr Cys Val Ile Ile Val Cys Lys  
50 55 60  
Met Leu Tyr Gln Leu Gln Thr Ile Lys Pro Glu Asn Phe Ser Val Asn  
65 70 75 80  
Cys Ser Leu Pro Asn Glu Asn Gln Thr Asn Ile Pro Phe Asn Glu Leu  
85 90 95  
Asn Lys Ser Leu Leu Tyr Ser Ala Pro Ile Asp Pro Thr Glu Trp Val  
100 105 110  
Gly Leu Arg Lys Ser Ser Pro Leu Leu Val Tyr Leu Arg Asn Asn Leu  
115 120 125  
Leu Met Leu Ala Ile Leu Ala Phe Glu Val Thr Ile Tyr Arg His Gln  
130 135 140  
Glu Tyr Tyr Arg Gly Arg Asn Asn Leu Thr Ala Pro Val Ser Arg Thr  
145 150 155 160  
Ile Phe His Asp Ile Thr Arg Leu His Leu Asp Asp Gly Leu Ile Asn  
165 170 175  
Cys Ala Lys Tyr Phe Ile Asn Tyr Phe Phe Tyr Lys Phe Gly Leu Glu  
180 185 190  
Thr Cys Phe Leu Met Ser Val Asn Val Ile Gly Gln Arg Met Asp Phe  
195 200 205  
Tyr Ala Met Ile His Ala Cys Trp Leu Ile Ala Val Leu Tyr Arg Arg  
210 215 220  
Arg Arg Lys Ala Ile Ala Glu Ile Trp Pro Lys Tyr Cys Cys Phe Leu  
225 230 235 240  
Ala Gly Ile Ile Thr Phe Gln Tyr Phe Ile Cys Ile Gly Ile Pro Pro  
245 250 255  
Ala Pro Cys Arg Asp Tyr Pro Trp Arg Phe Lys Gly Ala Ser Phe Asn  
260 265 270  
Asp Asn Ile Ile Lys Trp Leu Tyr Phe Pro Asp Phe Ile Val Arg Pro

275 280 285  
Asn Pro Val Phe Leu Val Tyr Asp Phe Met Leu Leu Leu Cys Ala Ser  
290 295 300  
Leu Gln Arg Gln Ile Phe Glu Asp Glu Asn Lys Ala Ala Val Arg Ile  
305 310 315 320  
Met Ala Gly Asp Asn Val Glu Ile Cys Met Asn Leu Asp Ala Ala Ser  
325 330 335  
Phe Ser Gln His Asn Pro Val Pro Asp Phe Ile His Cys Arg Ser Tyr  
340 345 350  
Leu Asp Met Ser Lys Val Ile Ile Phe Ser Tyr Leu Phe Trp Phe Val  
355 360 365  
Leu Thr Ile Ile Phe Ile Thr Gly Thr Thr Arg Ile Ser Ile Phe Cys  
370 375 380  
Met Gly Tyr Leu Val Ala Cys Phe Tyr Phe Leu Leu Phe Gly Gly Asp  
385 390 395 400  
Leu Leu Leu Lys Pro Ile Lys Ser Ile Leu Arg Tyr Trp Asp Trp Leu  
405 410 415  
Ile Ala Tyr Asn Ile Phe Val Ile Thr Met Lys Asn Ile Leu Ser Ile  
420 425 430  
Gly Ala Cys Gly Tyr Ile Gly Thr Leu Val His Asn Ser Cys Trp Leu  
435 440 445  
Ile Gln Ala Phe Ser Leu Ala Cys Thr Val Lys Gly Tyr Gln Met Pro  
450 455 460  
Ala Ala Asn Ser Pro Cys Thr Leu Pro Ser Gly Glu Ala Gly Ile Ile  
465 470 475 480  
Trp Asp Ser Ile Cys Phe Ala Phe Leu Leu Leu Gln Arg Arg Val Phe  
485 490 495  
Met Ser Tyr Tyr Phe Leu His Val Val Ala Asp Ile Lys Ala Ser Gln  
500 505 510

Ile Leu Ala Ser Arg Gly Ala Glu Leu Phe Gln Ala Thr Ile Val Lys  
515 520 525  
Ala Val Lys Ala Arg Ile Glu Glu Glu Lys Lys Ser Met Asp Gln Leu  
530 535 540  
Lys Arg Gln Met Asp Arg Ile Lys Ala Arg Gln Gln Lys Tyr Lys Lys  
545 550 555 560  
Gly Lys Glu Arg Met Leu Ser Leu Thr Gln Glu Pro Gly Glu Gly Gln  
565 570 575  
Asp Met Gln Lys Leu Ser Glu Glu Asp Asp Glu Arg Glu Ala Asp Lys  
580 585 590  
Gln Lys Ala Lys Gly Lys Lys Lys Gln Trp Trp Arg Pro Trp Val Asp  
595 600 605  
His Ala Ser Met Val Arg Ser Gly Asp Tyr Tyr Leu Phe Glu Thr Asp  
610 615 620  
Ser Glu Glu Glu Glu Glu Glu Glu Leu Lys Lys Glu Asp Glu Glu Pro  
625 630 635 640  
Pro Arg Arg Ser Ala Phe Gln Phe Val Tyr Gln Ala Trp Ile Thr Asp  
645 650 655  
Pro Lys Thr Ala Leu Arg  
660

&lt;210&gt; 2910

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2910

Met Arg Pro Gly Arg Gln Phe Ile Gln Ala Ala His Lys Leu Pro Met

1	5	10	15
His	Pro	Arg	Gln
Gly	Gly	Ala	Asp
Ala	Pro	Gln	Asp
Thr	Leu	Met	Lys
20	25	30	
Ala	Leu	Ala	Ala
His	Gly	Pro	Gly
Cys	Gly	Arg	Phe
Trp	Phe	Ala	Ser
35	40	45	
Phe	Pro	Lys	Val
Lys	Gly	Gln	Val
Val	Lys	Leu	Lys
Ala	Arg	Gln	His
50	55	60	
Arg	Arg	Gly	Asn
Cys	Trp	Gly	Leu
Gln	Thr	Pro	Glu
Arg	Leu	Trp	Pro
65	70	75	80
His	Pro	Ile	Gln
Ile	Pro	Ala	Pro
Pro	Pro	Ala	Arg
Pro	Pro	Gly	Ser
Pro			
85	90	95	
Arg	Leu	Cys	Trp
Cys	Gly	Ser	Arg
Ser	Leu	Pro	His
Leu	Gly	Val	Trp
100	105	110	
Pro	Arg	Ala	Pro
Gly			
115			

&lt;210&gt; 2911

&lt;211&gt; 556

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2911

Met	Ala	Ser	Lys	Pro	Ala	Ala	Gly	Lys	Ser	Arg	Gly	Glu	Lys	Arg	Lys
1	5	10	15												
Arg	Val	Val	Leu	Thr	Leu	Lys	Glu	Lys	Ile	Asp	Ile	Cys	Thr	Arg	Leu
20	25	30													
Glu	Lys	Gly	Glu	Ser	Arg	Lys	Ala	Leu	Met	Gln	Glu	Tyr	Asn	Val	Gly
35	40	45													

Met Ser Thr Leu Tyr Asp Ile Arg Ala His Lys Ala Gln Leu Leu Arg  
50 55 60  
Phe Phe Ala Ser Ser Asp Ser Asn Lys Ala Leu Glu Gln Arg Arg Thr  
65 70 75 80  
Leu His Thr Pro Lys Leu Glu His Leu Asp Arg Val Leu Tyr Glu Trp  
85 90 95  
Phe Leu Gly Lys Arg Ser Glu Gly Val Pro Val Ser Gly Pro Met Leu  
100 105 110  
Ile Glu Lys Ala Lys Asp Phe Tyr Glu Gln Thr Gln Leu Thr Glu Pro  
115 120 125  
Cys Val Phe Ser Gly Gly Trp Leu Trp Arg Phe Lys Ala Arg His Gly  
130 135 140  
Ile Lys Lys Leu Asp Ala Ser Ser Glu Lys Gln Ser Ala Asp His Gln  
145 150 155 160  
Ala Ala Glu Gln Phe Cys Ala Phe Phe Arg Ser Leu Ala Ala Glu His  
165 170 175  
Gly Leu Ser Ala Glu Gln Val Tyr Asn Ala Asp Glu Thr Gly Leu Phe  
180 185 190  
Trp Arg Cys Leu Pro Asn Pro Thr Pro Glu Gly Gly Ala Val Pro Gly  
195 200 205  
Pro Lys Gln Gly Lys Asp Arg Leu Thr Val Leu Met Cys Ala Asn Ala  
210 215 220  
Thr Gly Ser His Arg Leu Lys Pro Leu Ala Ile Gly Lys Cys Ser Gly  
225 230 235 240  
Pro Arg Ala Phe Lys Gly Ile Gln His Leu Pro Val Ala Tyr Lys Ala  
245 250 255  
Gln Gly Asn Ala Trp Val Asp Lys Glu Ile Phe Ser Asp Trp Phe His  
260 265 270  
His Ile Phe Val Pro Ser Val Arg Glu His Phe Arg Thr Ile Gly Leu

275 280 285  
Pro Glu Asp Ser Lys Ala Val Leu Leu Leu Asp Ser Ser Arg Ala His  
290 295 300  
Pro Gln Glu Ala Glu Leu Val Ser Ser Asn Val Phe Thr Ile Phe Leu  
305 310 315 320  
Pro Ala Ser Val Ala Ser Leu Val Gln Pro Met Glu Gln Gly Ile Arg  
325 330 335  
Arg Asp Phe Met Arg Asn Phe Ile Asn Pro Pro Val Pro Leu Gln Gly  
340 345 350  
Pro His Ala Arg Tyr Asn Met Asn Asp Ala Ile Phe Ser Val Ala Cys  
355 360 365  
Ala Trp Asn Ala Val Pro Ser His Val Phe Arg Arg Ala Trp Arg Lys  
370 375 380  
Leu Trp Pro Ser Val Ala Phe Ala Glu Gly Ser Ser Ser Glu Glu Glu  
385 390 395 400  
Leu Glu Ala Glu Cys Phe Pro Val Lys Pro His Asn Lys Ser Phe Ala  
405 410 415  
His Ile Leu Glu Leu Val Lys Glu Gly Ser Ser Cys Pro Gly Gln Leu  
420 425 430  
Arg Gln Arg Gln Ala Ala Ser Trp Gly Val Ala Gly Arg Glu Ala Glu  
435 440 445  
Gly Gly Arg Pro Pro Ala Ala Thr Ser Pro Ala Glu Val Val Trp Ser  
450 455 460  
Ser Glu Lys Thr Pro Lys Ala Asp Gln Asp Gly Arg Gly Asp Pro Gly  
465 470 475 480  
Glu Gly Glu Glu Val Ala Trp Glu Gln Ala Ala Val Ala Phe Asp Ala  
485 490 495  
Val Leu Arg Phe Ala Glu Arg Gln Pro Cys Phe Ser Ala Gln Glu Val  
500 505 510

Gly Gln Leu Arg Ala Leu Arg Ala Val Phe Arg Ser Gln Gln Gln Glu  
 515 520 525  
 Thr Val Gly Leu Glu Asp Val Val Val Thr Ser Pro Glu Glu Leu Ala  
 530 535 540  
 Ile Pro Lys Cys Cys Leu Glu Ala Ser Thr Glu Thr  
 545 550 555

<210> 2912

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2912

Met Leu Pro Val Ile Ser Thr Arg Glu Leu Ser Asn Phe Glu Leu Thr  
 1 5 10 15  
 Leu Ser Pro Asp Gly Thr Arg Val Gly Asn His Lys Cys Ser Asn Leu  
 20 25 30  
 Leu Asp Tyr Thr Glu Val Lys Thr His Tyr Gly Phe Leu Thr Asp Ala  
 35 40 45  
 Thr Lys Asn Pro Glu Ile Ile Gly Glu Thr Tyr Pro Tyr Gln Tyr Ser  
 50 55 60  
 Leu Ser Ile Arg Gly Ser Thr Thr Leu Arg Phe Tyr Arg Asn Leu Asn  
 65 70 75 80  
 Leu Glu Ala Cys Leu Trp Glu Phe Val Ser Tyr Tyr Asp Met Ser Glu  
 85 90 95  
 Leu Leu Ala Asp Cys Gly Gly Thr Ile Gly Thr Asp Gly Gln Val Gln  
 100 105 110  
 Ile Tyr Asn Ile



115

&lt;210&gt; 2913

&lt;211&gt; 457

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2913

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Met Ala Arg Glu Gly Leu Arg Thr Leu Val Val Ala Lys Lys Ala Leu
  1             5             10             15
Thr Glu Glu Gln Tyr Gln Asp Phe Glu Ser Arg Tyr Thr Gln Ser Lys
          20             25             30
Leu Ser Met His Asp Arg Ser Leu Lys Val Ala Ala Val Val Glu Ser
          35             40             45
Leu Glu Arg Glu Met Glu Leu Leu Cys Leu Thr Gly Val Glu Asp Gln
          50             55             60
Leu Gln Ala Asp Val Arg Pro Thr Leu Glu Met Leu Arg Asn Ala Gly
          65             70             75             80
Ile Lys Ile Trp Met Leu Thr Gly Asp Lys Leu Glu Thr Ala Thr Cys
          85             90             95
Ile Ala Lys Ser Ser His Leu Val Ser Arg Thr Gln Asp Ile His Ile
          100            105            110
Phe Arg Gln Val Thr Ser Arg Gly Glu Ala His Leu Glu Leu Asn Ala
          115            120            125
Phe Arg Arg Lys His Asp Cys Ala Leu Val Ile Ser Gly Asp Ser Leu
          130            135            140
Glu Val Cys Leu Lys Tyr Tyr Glu His Glu Phe Val Glu Leu Ala Cys
          145            150            155            160

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Gln Cys Pro Ala Val Val Cys Cys Arg Cys Ser Pro Thr Gln Lys Ala			
	165	170	175
Arg Ile Val Thr Leu Leu Gln Gln His Thr Gly Arg Arg Thr Cys Ala			
	180	185	190
Ile Gly Asp Gly Gly Asn Asp Val Ser Met Ile Gln Ala Ala Asp Cys			
	195	200	205
Gly Ile Gly Ile Glu Gly Lys Glu Gly Lys Gln Ala Ser Leu Ala Ala			
	210	215	220
Asp Phe Ser Ile Thr Gln Phe Arg His Ile Gly Arg Leu Leu Met Val			
	225	230	235
His Gly Arg Asn Ser Tyr Lys Arg Ser Ala Ala Leu Gly Gln Phe Val			
	245	250	255
Met His Arg Gly Leu Ile Ile Ser Thr Met Gln Ala Val Phe Ser Ser			
	260	265	270
Val Phe Tyr Phe Ala Ser Val Pro Leu Tyr Gln Gly Phe Leu Met Val			
	275	280	285
Gly Tyr Ala Thr Ile Tyr Thr Met Phe Pro Val Phe Ser Leu Val Leu			
	290	295	300
Asp Gln Asp Val Lys Pro Glu Met Ala Met Leu Tyr Pro Glu Leu Tyr			
	305	310	315
Lys Asp Leu Thr Lys Gly Arg Ser Leu Ser Phe Lys Thr Phe Leu Ile			
	325	330	335
Trp Val Leu Ile Ser Ile Tyr Gln Gly Gly Ile Leu Met Tyr Gly Ala			
	340	345	350
Leu Val Leu Phe Glu Ser Glu Phe Val His Val Val Ala Ile Ser Phe			
	355	360	365
Thr Ala Leu Ile Leu Thr Glu Leu Leu Met Val Ala Leu Thr Val Arg			
	370	375	380
Thr Trp His Trp Leu Met Val Val Ala Glu Phe Leu Ser Leu Gly Cys			

385                      390                      395                      400  
 Tyr Val Ser Ser Leu Ala Phe Leu Asn Glu Tyr Phe Asp Val Ala Phe  
                          405                      410                      415  
 Ile Thr Thr Val Thr Phe Leu Trp Lys Val Ser Ala Ile Thr Val Val  
                          420                      425                      430  
 Ser Cys Leu Pro Leu Tyr Val Leu Lys Tyr Leu Arg Arg Lys Leu Ser  
                          435                      440                      445  
 Pro Pro Ser Tyr Cys Lys Leu Ala Ser  
                          450                      455

<210> 2914

<211> 466

<212> PRT

<213> Homo sapiens

<400> 2914

Met Leu Ser Leu Arg Gln Arg Met Met His Ala Arg Phe Arg Asn Pro  
   1                      5                      10                      15  
 Leu Ser Arg Gln Pro Ala Arg Pro Ser Tyr Arg Gln Gly Tyr Asn Gly  
                          20                      25                      30  
 Arg Pro Asn Val Glu Gly Lys Val Leu Pro Gly Ser Asn Gly Lys Pro  
                          35                      40                      45  
 Asn Gly Gln Arg Ile Ile Asn Gly Pro Gln Gly Thr Lys Trp Val Val  
                          50                      55                      60  
 Asp Leu Asp Arg Gly Leu Val Leu Asn Ala Glu Gly Arg Tyr Leu Gln  
   65                      70                      75                      80  
 Asp Ser His Gly Asn Pro Leu Arg Ile Lys Leu Gly Gly Asp Gly Arg  
                          85                      90                      95

Thr Ile Val Asp Leu Glu Gly Thr Pro Val Val Ser Pro Asp Gly Leu  
100 105 110  
Pro Leu Phe Gly Gln Gly Arg His Gly Thr Pro Leu Ala Asn Ala Gln  
115 120 125  
Asp Lys Pro Ile Leu Ser Leu Gly Gly Lys Pro Leu Val Gly Leu Glu  
130 135 140  
Val Ile Lys Lys Thr Thr His Pro Pro Thr Thr Thr Met Gln Pro Thr  
145 150 155 160  
Thr Thr Thr Thr Pro Leu Pro Thr Thr Thr Thr Pro Arg Pro Thr Thr  
165 170 175  
Ala Thr Thr Arg Arg Thr Thr Thr Arg Arg Pro Thr Thr Thr Val Arg  
180 185 190  
Thr Thr Thr Arg Thr Thr Thr Thr Thr Thr Pro Lys Pro Thr Thr Pro  
195 200 205  
Ile Pro Thr Cys Pro Pro Gly Thr Leu Glu Arg His Asp Asp Asp Gly  
210 215 220  
Asn Leu Ile Met Ser Ser Asn Gly Ile Pro Glu Cys Tyr Ala Glu Glu  
225 230 235 240  
Asp Glu Phe Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu  
245 250 255  
Ala Tyr Val Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro  
260 265 270  
Pro Thr Thr Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile  
275 280 285  
Pro Glu Glu Gly Ala Ile Ser Ser Phe Pro Glu Glu Glu Phe Asp Leu  
290 295 300  
Ala Gly Arg Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys  
305 310 315 320  
Asp Pro Ser Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln

	325		330		335
Val	Asp	Ser	Leu	Asp	Glu
Ile	Ile	Pro	Asn	Asp	Leu
Lys	Lys	Ser	Asp		
	340		345		350
Leu	Pro	Pro	Gln	His	Ala
Pro	Arg	Asn	Ile	Thr	Val
Val	Val	Ala	Val	Glu	
	355		360		365
Gly	Cys	His	Ser	Phe	Val
Ile	Val	Asp	Trp	Asp	Lys
Ala	Thr	Pro	Gly		
	370		375		380
Asp	Val	Val	Thr	Gly	Tyr
Leu	Val	Tyr	Ser	Ala	Ser
Tyr	Glu	Asp	Phe		
	385		390		395
					400
Ile	Arg	Asn	Lys	Trp	Ser
Thr	Gln	Ala	Ser	Ser	Val
Thr	His	Leu	Pro		
	405		410		415
Ile	Glu	Asn	Leu	Lys	Pro
Asn	Thr	Arg	Tyr	Tyr	Phe
Lys	Val	Gln	Ala		
	420		425		430
Gln	Asn	Pro	His	Gly	Tyr
Gly	Pro	Ile	Ser	Pro	Ser
Val	Ser	Phe	Val		
	435		440		445
Thr	Glu	Ser	Asp	Asn	Pro
Leu	Leu	Val	Val	Arg	Pro
Pro	Gly	Gly	Glu		
	450		455		460
Pro	Ile				
	465				

&lt;210&gt; 2915

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2915

Met His Thr Glu Asp Asn Pro Gly Lys Val Glu His Thr Glu Glu Leu

1

5

10

15

Ser Ser Ile Thr Glu Val Val Thr Thr Glu Glu Asn Ile Pro Asp Val  
                   20                                  25                                  30  
 Val Pro Gly Ser His Leu Thr Pro Ile Glu Arg Glu Ser Ser Ser Pro  
                   35                                  40                                  45  
 Leu Ser Ser Asn Gln Ser Glu Pro Gly Ser Ile Ala Leu Asn Ser Tyr  
                   50                                  55                                  60  
 His Ser Arg Asn Cys Ser Glu Ser Asp His Ser Arg Asn Gly Phe Asp  
                   65                                  70                                  75                                  80  
 Thr Asp Ser Ser Cys Leu Glu Ser His Ser Ser Leu Ser Asp Ser Glu  
                                   85                                  90                                  95  
 Phe Pro Pro Asn Asn Lys Gly Glu Ile Lys Thr Glu Gly Gln Glu Leu  
                   100                                  105                                  110  
 Ile Thr Val Ile Lys Ala Pro Thr Ser Phe Gly Tyr Asp Lys Pro His  
                   115                                  120                                  125  
 Val Leu Val Asp Leu Leu Val Asp Asp Ser Gly Lys Glu Ser Leu Ile  
                   130                                  135                                  140  
 Gly Tyr Arg Pro Thr Glu Asp Ser Lys Glu Phe Ser  
                   145                                  150                                  155

&lt;210&gt; 2916

&lt;211&gt; 558

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2916

Met Asp Gly Leu Val Asp Leu Thr Val Gly Ala Gln Gly His Val Leu  
           1                                  5                                  10                                  15  
 Leu Leu Arg Ser Gln Pro Val Leu Arg Val Lys Ala Ile Met Glu Phe

20 25 30  
Asn Pro Arg Glu Val Ala Arg Asn Val Phe Glu Cys Asn Asp Gln Val  
35 40 45  
Val Lys Gly Lys Glu Ala Gly Glu Val Arg Val Cys Leu His Val Gln  
50 55 60  
Lys Ser Thr Arg Asp Arg Leu Arg Glu Gly Gln Ile Gln Ser Val Val  
65 70 75 80  
Thr Tyr Asp Leu Ala Leu Asp Ser Gly Arg Pro His Ser Arg Ala Val  
85 90 95  
Phe Asn Glu Thr Lys Asn Ser Thr Arg Arg Gln Thr Gln Val Leu Gly  
100 105 110  
Leu Thr Gln Thr Cys Glu Thr Leu Lys Leu Gln Leu Pro Asn Cys Ile  
115 120 125  
Glu Asp Pro Val Ser Pro Ile Val Leu Arg Leu Asn Phe Ser Leu Val  
130 135 140  
Gly Thr Pro Leu Ser Ala Phe Gly Asn Leu Arg Pro Val Leu Ala Glu  
145 150 155 160  
Asp Ala Gln Arg Leu Phe Thr Ala Leu Phe Pro Phe Glu Lys Asn Cys  
165 170 175  
Gly Asn Asp Asn Ile Cys Gln Asp Asp Leu Ser Ile Thr Phe Ser Phe  
180 185 190  
Met Ser Leu Asp Cys Leu Val Val Gly Gly Pro Arg Glu Phe Asn Val  
195 200 205  
Thr Val Thr Val Arg Asn Asp Gly Glu Asp Ser Tyr Arg Thr Gln Val  
210 215 220  
Thr Phe Phe Phe Pro Leu Asp Leu Ser Tyr Arg Lys Val Ser Thr Leu  
225 230 235 240  
Gln Asn Gln Arg Ser Gln Arg Ser Trp Arg Leu Ala Cys Glu Ser Ala  
245 250 255

Ser Ser Thr Glu Val Ser Gly Ala Leu Lys Ser Thr Ser Cys Ser Ile  
260 265 270  
Asn His Pro Ile Phe Pro Glu Asn Ser Glu Val Thr Phe Asn Ile Thr  
275 280 285  
Phe Asp Val Asp Ser Lys Ala Ser Leu Gly Asn Lys Leu Leu Leu Lys  
290 295 300  
Ala Asn Val Thr Ser Glu Asn Asn Met Pro Arg Thr Asn Lys Thr Glu  
305 310 315 320  
Phe Gln Leu Glu Leu Pro Val Lys Tyr Ala Val Tyr Met Val Val Thr  
325 330 335  
Ser His Gly Val Ser Thr Lys Tyr Leu Asn Phe Thr Ala Ser Glu Asn  
340 345 350  
Thr Ser Arg Val Met Gln His Gln Tyr Gln Val Ser Asn Leu Gly Gln  
355 360 365  
Arg Ser Leu Pro Ile Ser Leu Val Phe Leu Val Pro Val Arg Leu Asn  
370 375 380  
Gln Thr Val Ile Trp Asp Arg Pro Gln Val Thr Phe Ser Glu Asn Leu  
385 390 395 400  
Ser Ser Thr Cys His Thr Lys Glu Arg Leu Pro Ser His Ser Asp Phe  
405 410 415  
Leu Ala Glu Leu Arg Lys Ala Pro Val Val Asn Cys Ser Ile Ala Val  
420 425 430  
Cys Gln Arg Ile Gln Cys Asp Ile Pro Phe Phe Gly Ile Gln Glu Glu  
435 440 445  
Phe Asn Ala Thr Leu Lys Gly Asn Leu Ser Phe Asp Trp Tyr Ile Lys  
450 455 460  
Thr Ser His Asn His Leu Leu Ile Val Ser Thr Ala Glu Ile Leu Phe  
465 470 475 480  
Asn Asp Ser Val Phe Thr Leu Leu Pro Gly Gln Gly Ala Phe Val Arg



	485		490		495										
Ser	Gln	Thr	Glu	Thr	Lys	Val	Glu	Pro	Phe	Glu	Val	Pro	Asn	Pro	Leu
	500						505						510		
Pro	Leu	Ile	Val	Gly	Ser	Ser	Val	Gly	Gly	Leu	Leu	Leu	Leu	Ala	Leu
	515						520						525		
Ile	Thr	Ala	Ala	Leu	Tyr	Lys	Leu	Gly	Phe	Phe	Lys	Arg	Gln	Tyr	Lys
	530						535						540		
Asp	Met	Met	Ser	Glu	Gly	Gly	Pro	Pro	Gly	Ala	Glu	Pro	Gln		
545							550						555		

&lt;210&gt; 2917

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2917

Met	Pro	Leu	Gln	Leu	Leu	Leu	Leu	Leu	Ile	Leu	Leu	Gly	Pro	Gly	Asn
1				5					10					15	
Ser	Leu	Gln	Leu	Trp	Asp	Thr	Trp	Ala	Asp	Glu	Ala	Glu	Lys	Ala	Leu
			20					25					30		
Gly	Pro	Leu	Leu	Ala	Arg	Asp	Arg	Arg	Gln	Ala	Thr	Glu	Tyr	Glu	Tyr
		35					40					45			
Leu	Asp	Tyr	Asp	Phe	Leu	Pro	Glu	Thr	Glu	Pro	Pro	Glu	Ile	Leu	Arg
	50					55						60			
Asn	Ser	Thr	Asp	Thr	Thr	Pro	Leu	Thr	Gly	Pro	Gly	Thr	Pro	Glu	Ser
65					70					75				80	
Thr	Thr	Val	Glu	Pro	Ala	Asp	His	Gly	Ala	Gly	Gln	His	Gly	Glu	Pro
					85					90				95	

Val His Gly Phe Ser Ser Tyr Gly Asp Thr Asp His Ser Thr Ser Ser  
100 105 110  
His Gly Gly Thr Asp His Ser Thr Ser Ala His Gly Gly Thr Asp His  
115 120 125  
Ser Thr Gly Ser His Arg Gly Thr Asp Asn Ser Thr Asp Gly His Gly  
130 135 140  
Gly Thr Asp His Ser Thr Gly Ser His Arg Gly Thr Asp His Ser Thr  
145 150 155 160  
Ser Ser His Gly Ser Thr Asp His Ser Thr His Arg Pro Gly Gly Thr  
165 170 175  
Asp His Cys Thr Ser Ser His Gly Gly Thr Asp His Cys Thr Ser Ser  
180 185 190  
His Gly Ser Thr Asp His Ser Thr Ser Ser His Gly Gly Thr Asp His  
195 200 205  
Ser Asn His Ser His Gly Gly Thr Asp His Cys Thr Arg Ser His Gly  
210 215 220  
Gly Thr Asp His Ser Thr His Ser His Gly Gly Thr Asp His Ser Thr  
225 230 235 240  
Gly Ser His Gly Gly Pro Val His Arg Thr Gln Cys His Arg Gly Pro  
245 250 255  
Val His Gly Thr Tyr Tyr Gln Lys Arg Ser Val His Thr Leu Phe Cys  
260 265 270  
Val Leu Cys Tyr Ser Gln Gly His Ser His Gly Ser Gln Gln Phe Val  
275 280 285  
Arg Gln Leu Pro Ser Gly Gly Pro Arg Pro His Leu Cys Glu Ala Val  
290 295 300  
Pro Ala Gly His Pro Asn Leu Gly Ala Gly Gly His Tyr Leu Leu Arg  
305 310 315 320  
Val His Cys Gly Ala Gly Gly Pro Pro Leu Pro Gln Gly Pro His Val

325

330

335

Pro Arg Ala

&lt;210&gt; 2918

&lt;211&gt; 394

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2918

Met Gly Pro Ala Thr Leu Gly Ala Ala Ser Thr Pro Ser Pro Ser Pro

1

5

10

15

Trp Arg Thr Pro Thr Ser Ser Ser Gly Thr Gln Val Gln Gly Leu Cys

20

25

30

Gly Thr Phe Thr Gln Asn Gln Gln Asp Asp Phe Leu Thr Pro Ala Gly

35

40

45

Asp Val Glu Thr Ser Ile Ala Ala Phe Ala Ser Lys Phe Gln Val Ala

50

55

60

Gly Lys Gly Arg Cys Pro Ser Glu Asp Ser Ala Leu Leu Ser Pro Cys

65

70

75

80

Thr Thr His Ser Gln Arg His Ala Phe Ala Glu Ala Ala Cys Ala Ile

85

90

95

Leu His Ser Ser Val Phe Gln Glu Cys His Arg Leu Val Asp Lys Glu

100

105

110

Pro Phe Tyr Leu Arg Cys Leu Ala Ala Val Cys Gly Cys Asp Pro Gly

115

120

125

Ser Asp Cys Leu Cys Pro Val Leu Ser Ala Tyr Ala Arg Arg Cys Ala

130

135

140

Gln Glu Gly Ala Ser Pro Pro Trp Arg Asn Gln Thr Leu Cys Pro Val  
 145                      150                      155                      160  
 Met Cys Pro Gly Gly Gln Glu Tyr Arg Glu Cys Ala Pro Ala Cys Gly  
                                  165                      170                      175  
 Gln His Cys Gly Lys Pro Glu Asp Cys Gly Glu Leu Gly Ser Cys Val  
                                  180                      185                      190  
 Ala Gly Cys Asn Cys Pro Leu Gly Leu Leu Trp Asp Pro Glu Gly Gln  
                                  195                      200                      205  
 Cys Val Pro Pro Ser Leu Cys Pro Cys Gln Leu Gly Ala Arg Arg Tyr  
                                  210                      215                      220  
 Ala Pro Gly Ser Ala Thr Met Lys Glu Cys Asn Arg Cys Ile Cys Gln  
 225                      230                      235                      240  
 Glu Arg Gly Leu Trp Asn Cys Thr Ala Arg His Cys Pro Ser Gln Gly  
                                  245                      250                      255  
 His Ser Ala Pro Gly Ser Leu Ser Met Pro Leu Val Pro Val Ser Ser  
                                  260                      265                      270  
 Pro Val Thr Ala Pro Ala Pro Ile Thr Pro Ala Leu Gln Ala Val Leu  
                                  275                      280                      285  
 Met Ala Val Ser Val His Gln Ala Arg Cys Cys Trp Thr Ser Ala Val  
                                  290                      295                      300  
 Cys Leu Leu Thr Ser Val Pro Ala Val Thr Val Gly Ser Gly Thr Cys  
 305                      310                      315                      320  
 Pro Thr Pro Pro Ser Arg Lys Thr Ala Thr Phe Gly Arg Ala Val Thr  
                                  325                      330                      335  
 Val Asn Gly Val Ser Val Thr Pro Pro Lys Val Tyr Thr Gly Pro Glu  
                                  340                      345                      350  
 Leu Ser Leu Arg Arg Ala Gly Leu Phe Leu Leu Leu Ser Thr His Leu  
                                  355                      360                      365  
 Gly Leu Thr Leu Leu Trp Asp Gly Asp Gln Ala Pro Ala Leu Pro Gln

370                      375                      380  
Pro Leu Asp Leu Cys Pro Ala Leu Ala Pro  
385                      390

<210> 2919

<211> 371

<212> PRT

<213> Homo sapiens

<400> 2919

Met Ser His Glu Lys Ser Phe Leu Val Ser Gly Asp Asn Tyr Pro Pro  
1                      5                      10                      15  
Pro Asn Pro Gly Tyr Pro Gly Gly Pro Gln Pro Pro Met Pro Pro Tyr  
20                      25                      30  
Ala Gln Pro Pro Tyr Pro Gly Ala Pro Tyr Pro Gln Pro Pro Phe Gln  
35                      40                      45  
Pro Ser Pro Tyr Gly Gln Pro Gly Tyr Pro His Gly Pro Ser Pro Tyr  
50                      55                      60  
Pro Gln Gly Gly Tyr Pro Gln Gly Pro Tyr Pro Gln Gly Gly Tyr Pro  
65                      70                      75                      80  
Gln Gly Pro Tyr Pro Gln Glu Gly Tyr Pro Gln Gly Pro Tyr Pro Gln  
85                      90                      95  
Gly Gly Tyr Pro Gln Gly Pro Tyr Pro Gln Ser Pro Phe Pro Pro Asn  
100                      105                      110  
Pro Tyr Gly Gln Pro Gln Val Phe Pro Gly Gln Asp Pro Asp Ser Pro  
115                      120                      125  
Gln His Gly Asn Tyr Gln Glu Glu Gly Pro Pro Ser Tyr Tyr Asp Asn  
130                      135                      140

Gln Asp Phe Pro Ala Thr Asn Trp Asp Asp Lys Ser Ile Arg Gln Ala  
 145                      150                      155                      160  
 Phe Ile Arg Lys Val Phe Leu Val Leu Thr Leu Gln Leu Ser Val Thr  
                          165                      170                      175  
 Leu Ser Thr Val Ser Val Phe Thr Phe Val Ala Glu Val Lys Gly Phe  
                          180                      185                      190  
 Val Arg Glu Asn Val Trp Thr Tyr Tyr Val Ser Tyr Ala Val Phe Phe  
                          195                      200                      205  
 Ile Ser Leu Ile Val Leu Ser Cys Cys Gly Asp Phe Arg Arg Lys His  
                          210                      215                      220  
 Pro Trp Asn Leu Val Ala Leu Ser Val Leu Thr Ala Ser Leu Ser Tyr  
 225                      230                      235                      240  
 Met Val Gly Met Ile Ala Ser Phe Tyr Asn Thr Glu Ala Val Ile Met  
                          245                      250                      255  
 Ala Val Gly Ile Thr Thr Ala Val Cys Phe Thr Val Val Ile Phe Ser  
                          260                      265                      270  
 Met Gln Thr Arg Tyr Asp Phe Thr Ser Cys Met Gly Val Leu Leu Val  
                          275                      280                      285  
 Ser Met Val Val Leu Phe Ile Phe Ala Ile Leu Cys Ile Phe Ile Arg  
                          290                      295                      300  
 Asn Arg Ile Leu Glu Ile Val Tyr Ala Ser Leu Gly Ala Leu Leu Phe  
 305                      310                      315                      320  
 Thr Cys Phe Leu Ala Val Asp Thr Gln Leu Leu Leu Gly Asn Lys Gln  
                          325                      330                      335  
 Leu Ser Leu Ser Pro Glu Glu Tyr Val Phe Ala Ala Leu Asn Leu Tyr  
                          340                      345                      350  
 Thr Asp Ile Ile Asn Ile Phe Leu Tyr Ile Leu Thr Ile Ile Gly Arg  
                          355                      360                      365  
 Ala Lys Glu

370

&lt;210&gt; 2920

&lt;211&gt; 529

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2920

Met	Ser	Gly	Leu	Leu	Thr	Asp	Pro	Glu	Gln	Arg	Ala	Gln	Glu	Pro	Arg
1				5					10				15		
Tyr	Pro	Gly	Phe	Val	Leu	Gly	Leu	Asp	Val	Gly	Ser	Ser	Val	Ile	Arg
			20					25					30		
Cys	His	Val	Tyr	Asp	Arg	Ala	Ala	Arg	Val	Cys	Gly	Ser	Ser	Val	Gln
		35					40					45			
Lys	Val	Glu	Asn	Leu	Tyr	Pro	Gln	Ile	Gly	Trp	Val	Glu	Ile	Asp	Pro
	50					55				60					
Asp	Val	Leu	Trp	Ile	Gln	Phe	Val	Ala	Val	Ile	Lys	Glu	Ala	Val	Lys
65				70						75				80	
Ala	Ala	Gly	Ile	Gln	Met	Asn	Gln	Ile	Val	Gly	Leu	Gly	Ile	Ser	Thr
				85					90					95	
Gln	Arg	Ala	Thr	Phe	Ile	Thr	Trp	Asn	Lys	Lys	Thr	Gly	Asn	His	Phe
		100							105				110		
His	Asn	Phe	Ile	Ser	Trp	Gln	Asp	Leu	Arg	Ala	Val	Glu	Leu	Val	Lys
	115						120					125			
Ser	Trp	Asn	Asn	Ser	Leu	Leu	Met	Lys	Ile	Phe	His	Ser	Ser	Cys	Arg
	130					135					140				
Val	Leu	His	Phe	Phe	Thr	Arg	Ser	Lys	Arg	Leu	Phe	Thr	Ala	Ser	Leu
145					150					155				160	

Phe Thr Phe Thr Thr Gln Gln Thr Ser Leu Arg Leu Val Trp Ile Leu  
165 170 175  
Gln Asn Leu Thr Glu Val Gln Lys Ala Val Glu Glu Glu Asn Cys Cys  
180 185 190  
Phe Gly Thr Ile Asp Thr Trp Leu Leu Tyr Lys Leu Thr Lys Gly Ser  
195 200 205  
Val Tyr Ala Thr Asp Phe Ser Asn Ala Ser Thr Thr Gly Leu Phe Asp  
210 215 220  
Pro Tyr Lys Met Cys Trp Ser Gly Met Ile Thr Ser Leu Ile Ser Ile  
225 230 235 240  
Pro Leu Ser Leu Leu Pro Pro Val Arg Asp Thr Ser His Asn Phe Gly  
245 250 255  
Ser Val Asp Glu Glu Ile Phe Gly Val Pro Ile Pro Ile Val Ala Leu  
260 265 270  
Val Ala Asp Gln Gln Ser Ala Met Phe Gly Glu Cys Cys Phe Gln Thr  
275 280 285  
Gly Asp Val Lys Leu Thr Met Gly Thr Gly Thr Phe Leu Asp Ile Asn  
290 295 300  
Thr Gly Asn Ser Leu Gln Gln Thr Thr Gly Gly Phe Tyr Pro Leu Ile  
305 310 315 320  
Gly Trp Lys Ile Gly Gln Glu Val Val Cys Leu Ala Glu Ser Asn Ala  
325 330 335  
Gly Asp Ile Gly Thr Ala Ile Lys Trp Ala Gln Gln Leu Asp Leu Phe  
340 345 350  
Thr Asp Ala Ala Glu Thr Glu Lys Met Ala Lys Ser Leu Glu Asp Ser  
355 360 365  
Glu Gly Val Cys Phe Val Pro Ser Phe Ser Gly Leu Gln Ala Pro Leu  
370 375 380  
Asn Asp Pro Trp Ala Cys Ala Ser Phe Met Gly Leu Lys Pro Ser Thr



385                      390                      395                      400  
Ser Lys Tyr His Leu Val Arg Ala Ile Leu Glu Ser Ile Ala Phe Arg  
                         405                      410                      415  
Asn Lys Gln Leu Tyr Glu Met Met Lys Lys Glu Ile His Ile Pro Val  
                         420                      425                      430  
Arg Lys Ile Arg Ala Asp Gly Gly Val Cys Lys Asn Gly Phe Val Met  
                         435                      440                      445  
Gln Met Thr Ser Asp Leu Ile Asn Glu Asn Ile Asp Arg Pro Ala Asp  
                         450                      455                      460  
Ile Asp Met Ser Cys Leu Gly Ala Ala Ser Leu Ala Gly Leu Ala Val  
465                      470                      475                      480  
Gly Phe Trp Thr Asp Lys Glu Glu Leu Lys Lys Leu Arg Gln Ser Glu  
                         485                      490                      495  
Val Val Phe Lys Pro Gln Lys Lys Cys Gln Glu Tyr Glu Met Ser Leu  
                         500                      505                      510  
Glu Asn Trp Ala Lys Ala Val Lys Arg Ser Met Asn Trp Tyr Asn Lys  
                         515                      520                      525  
Thr

&lt;210&gt; 2921

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2921

Met Lys Ser Val Asp Leu Gln Ala Gly Ala Ala Glu Arg Gly Gly Glu

1

5

10

15

Val Glu Asn Ser Gly Leu Gly Leu Asp Ser Gly Pro Gly Val Val Trp  
 20 25 30  
 Ser Pro Arg Ala Leu Asn Pro Glu Gly Ser Gly Leu Thr Ser Ala Pro  
 35 40 45  
 Lys Ser Arg Val Pro His Gly Gly Ser Gly Pro Trp Lys Phe Arg Thr  
 50 55 60  
 Pro Gln Gln Phe Arg Ala Val Ile Ala Phe Pro Lys Pro Gly Ser Pro  
 65 70 75 80  
 Gly Pro Arg Gln Val Ser Pro Arg Cys Asp Leu Gly Arg Ala Glu Arg  
 85 90 95  
 Arg Ala Pro Ser Ser Leu Leu Gly Val Gly Gly Arg Ala Glu Asn Arg  
 100 105 110  
 Asp Val Ser Ala Val Arg Pro Thr Pro Ala Leu Gln Ser Cys Cys Arg  
 115 120 125  
 Pro Gly Leu Leu Gln Pro Gly Leu Ser Arg Pro Pro Lys Leu Pro Gly  
 130 135 140  
 Phe Arg Pro Pro Leu Leu Pro Ala Leu Trp Gly Gly Gly Gly Trp Thr  
 145 150 155 160  
 Gln Ala Asp Ala Pro Arg Trp Ala Gly Tyr Leu Glu Arg Gly Pro Ala  
 165 170 175  
 Ser Arg Thr Pro Ser Arg Ala Pro Val Arg Lys Arg Arg Lys Phe Arg  
 180 185 190  
 Pro Gly Ala Gln Gly Ser Glu Met Arg Arg Pro Pro His Pro Pro Arg  
 195 200 205  
 Phe Leu Pro Ala Val Leu Ala Leu Thr Ser  
 210 215

&lt;210&gt; 2922

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

Met Gly Gln Pro Ser Leu Thr Trp Met Leu Met Val Val Val Ala Ser

1 5 10 15

Trp Phe Ile Thr Thr Ala Ala Thr Asp Thr Ser Glu Ala Arg Trp Cys

20 25 30

Ser Glu Cys His Ser Asn Ala Thr Cys Thr Glu Asp Glu Ala Val Thr

35 40 45

Thr Cys Thr Cys Gln Glu Gly Phe Thr Gly Asp Gly Leu Thr Cys Val

50 55 60

Asp Leu Arg Gly Trp Tyr Arg Phe Val Gly Gln Gly Gly Ala Arg Met

65 70 75 80

Ala Glu Thr Cys Val Pro Val Leu Arg Cys Asn Thr Ala Ala Pro Met

85 90 95

Trp Leu Asn Gly Thr His Pro Ser Ser Asp Glu Gly Ile Val Ser Arg

100 105 110

Lys Ala Cys Ala His Trp Ser Gly His Cys Cys Leu Trp Asp Ala Ser

115 120 125

Val Gln Val Lys Ala Cys Ala Gly Gly Tyr Tyr Val Tyr Asn Leu Thr

130 135 140

Ala Pro Pro Glu Cys His Leu Ala Tyr Cys Thr Asp Pro Ser Ser Val

145 150 155 160

Glu Gly Thr Cys Glu Glu Cys Ser Ile Asp Glu Asp Cys Lys Ser Asn

165 170 175

Asn Gly Arg Trp His Cys Gln Cys Lys Gln Asp Phe Asn Ile Thr Asp

180 185 190

Ile Ser Leu Leu Glu His Arg Leu Glu Cys Gly Ala Asn Asp Met Lys  
195 200 205  
Val Ser Leu Gly Lys Cys Gln Leu Lys Ser Leu Gly Phe Asp Lys Val  
210 215 220  
Phe Met Tyr Leu Ser Asp Ser Arg Cys Ser Gly Phe Asn Asp Arg Asp  
225 230 235 240  
Asn Arg Asp Trp Val Ser Val Val Thr Pro Ala Arg Asp Gly Pro Cys  
245 250 255  
Gly Thr Val Leu Thr Arg Asn Glu Thr His Ala Thr Tyr Ser Asn Thr  
260 265 270  
Leu Tyr Leu Ala Asp Glu Ile Ile Ile Arg Asp Leu Asn Ile Lys Ile  
275 280 285  
Asn Phe Ala Cys Ser Tyr Pro Leu Asp Met Lys Val Ser Leu Lys Thr  
290 295 300  
Ala Leu Gln Pro Met Val Ser Ala Leu Asn Ile Arg Val Gly Gly Thr  
305 310 315 320  
Gly Met Phe Thr Val Arg Met Ala Leu Phe Gln Thr Pro Ser Tyr Thr  
325 330 335  
Gln Pro Tyr Gln Gly Ser Ser Val Thr Leu Ser Thr Glu Ala Phe Leu  
340 345 350  
Tyr Val Gly Thr Met Leu Asp Gly Gly Asp Leu Ser Arg Phe Ala Leu  
355 360 365  
Leu Met Thr Asn Cys Tyr Ala Thr Pro Ser Ser Asn Ala Thr Asp Pro  
370 375 380  
Leu Lys Tyr Phe Ile Ile Gln Asp Arg Cys Pro His Thr Arg Asp Ser  
385 390 395 400  
Thr Ile Gln Val Val Glu Asn Gly Glu Ser Ser Gln Gly Arg Phe Ser  
405 410 415  
Val Gln Met Phe Arg Phe Ala Gly Asn Tyr Asp Leu Val Tyr Leu His

420                      425                      430  
 Cys Glu Val Tyr Leu Cys Asp Thr Met Asn Glu Lys Cys Lys Pro Thr  
 435                      440                      445  
 Cys Ser Gly Thr Arg Phe Arg Ser Gly Ser Val Ile Asp Gln Ser Arg  
 450                      455                      460  
 Val Leu Asn Leu Gly Pro Ile Thr Arg Lys Gly Val Gln Ala Thr Val  
 465                      470                      475                      480  
 Ser Arg Ala Phe Ser Ser Leu Gly Leu Leu Lys Val Trp Leu Pro Leu  
 485                      490                      495  
 Leu Leu Ser Ala Thr Leu Thr Leu Thr Phe Gln  
 500                      505

&lt;210&gt; 2923

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2923

Met Val Thr Gly Pro Cys Leu Thr Cys Val Ser Ser Leu Ile Glu Arg  
 1                      5                      10                      15  
 Ala Ser Pro Asn His Pro Thr Asn Lys Gly Leu Thr Leu Leu Pro Trp  
 20                      25                      30  
 Leu Glu Cys Ser Gly Pro Ile Ile Ala His Cys Ser Leu Asp Phe Pro  
 35                      40                      45  
 Ala Ser Val Asp Pro Pro Thr Leu Ile Ser Arg Val Ala Gly Thr Ala  
 50                      55                      60  
 Gly Leu Leu Ile Leu Arg Phe Ser Ser Ala Ser Ala Asn Pro Glu Thr  
 65                      70                      75                      80

Ala Arg Pro Ile Pro Pro Leu Pro Cys Pro Pro Pro Arg Leu Leu His

85

90

95

Met Lys Thr Thr Arg Met Lys Thr Phe Met Met Ile His Phe His Leu

100

105

110

Met Asn Lys Leu Gln Glu Ile Ile Gln Glu Glu Arg His Gly Gly Met

115

120

125

Leu Glu Ser Leu Leu Ser Leu Lys Val Gly Asn Pro Gly Ser Cys Ser

130

135

140

Cys Ser His

145

&lt;210&gt; 2924

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2924

Met Ala Arg Glu Glu Cys Lys Ala Leu Leu Asp Gly Leu Asn Lys Thr

1

5

10

15

Thr Ala Cys Tyr His His Leu Val Leu Thr Val Gly Gly Ser Ala Asp

20

25

30

Ser Gln Asn Leu Arg Gln Glu Leu Gln Lys Thr Arg Gln Lys Ala Gln

35

40

45

Glu Leu Ala Val Ser Thr Cys Ala Arg Leu Thr Ala Val Leu Arg Asp

50

55

60

Arg Gly Leu Ala Ala Asp Glu Arg Ala Glu Phe Glu Arg Leu Trp Val

65

70

75

80

Ala Phe Ser Gly Cys Leu Asp Leu Leu Glu Ala Asp Met Arg Arg Ala

	85		90		95										
Leu	Glu	Leu	Gly	Ala	Ala	Phe	Pro	Leu	His	Ala	Pro	Arg	Arg	Pro	Leu
	100							105						110	
Val	Arg	Thr	Gly	Val	Ala	Gly	Ala	Ser	Ser	Gly	Val	Ala	Ala	Arg	Ala
	115							120						125	
Leu	Ser	Thr	Arg	Ser	Leu	Arg	Leu	Glu	Ala	Glu	Gly	Asp	Phe	Asp	Val
	130							135						140	
Ala	Asp	Leu	Arg	Glu	Leu	Glu	Arg	Glu	Val	Leu	Gln	Val	Gly	Glu	Met
145								150						155	160
Ile	Asp	Asn	Met	Glu	Met	Lys	Val	Asn	Val	Pro	Arg	Trp	Thr	Val	Gln
								165						170	175
Ala	Arg	Gln	Ala	Ala	Gly	Ala	Glu	Leu	Leu	Ser	Thr	Val	Ser	Ala	Gly
								180						185	190
Pro	Ser	Ser	Val	Val	Ser	Leu	Gln	Glu	Arg	Gly	Gly	Gly	Cys	Asp	Pro
								195						200	205
Arg	Lys	Ala	Leu	Ala	Ala	Ile	Leu	Phe	Gly	Ala	Val	Leu	Leu	Ala	Ala
								210						215	220
Val	Ala	Leu	Ala	Val	Cys	Val	Ala	Lys	Leu	Ser					
225								230						235	

&lt;210&gt; 2925

&lt;211&gt; 406

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2925

Met	Leu	Ser	Ser	Ala	Gly	Gly	Ala	Pro	Glu	Gly	Lys	Asp	Asp	Lys	Lys
1				5					10					15	

Asp Thr Asp Val Gly Gly Gly Gly Lys Gly Thr Gly Gly Ala Ser Ala  
20 25 30  
Glu Gly Gly Pro Thr Gly Leu Ala His Gly Arg Ile Ser Cys Gly Gly  
35 40 45  
Gly Ile Asn Val Asp Val Asn Gln His Pro Asp Gly Gly Pro Gly Gly  
50 55 60  
Lys Ala Leu Gly Ser Asp Cys Gly Gly Ser Ser Gly Ser Ser Ser Gly  
65 70 75 80  
Ser Gly Pro Ser Ala Pro Thr Ser Ser Ser Val Leu Gly Ser Gly Leu  
85 90 95  
Val Ala Pro Val Ser Pro Tyr Lys Pro Gly Gln Thr Val Phe Pro Leu  
100 105 110  
Pro Pro Ala Gly Met Thr Tyr Pro Gly Ser Leu Ala Gly Ala Tyr Ala  
115 120 125  
Gly Tyr Pro Pro Gln Phe Leu Pro His Gly Val Ala Leu Asp Pro Thr  
130 135 140  
Lys Pro Gly Ser Leu Val Gly Ala Gln Leu Ala Ala Ala Ala Ala Gly  
145 150 155 160  
Ser Leu Gly Cys Ser Lys Pro Ala Gly Ser Ser Pro Leu Ala Gly Ala  
165 170 175  
Ser Pro Pro Ser Val Met Thr Ala Ser Leu Cys Arg Asp Pro Tyr Cys  
180 185 190  
Leu Ser Tyr His Cys Ala Ser His Leu Ala Gly Ala Ala Ala Ala Ser  
195 200 205  
Ala Ser Cys Ala His Asp Pro Ala Ala Ala Ala Ala Ala Leu Lys Ser  
210 215 220  
Gly Tyr Pro Leu Val Tyr Pro Thr His Pro Leu His Gly Val His Ser  
225 230 235 240  
Ser Leu Thr Ala Ala Ala Ala Ala Gly Ala Thr Pro Pro Ser Leu Ala



245 250 255  
Gly His Pro Leu Tyr Pro Tyr Gly Phe Met Leu Pro Asn Asp Pro Leu  
260 265 270  
Pro His Ile Cys Asn Trp Val Ser Ala Asn Gly Pro Cys Asp Lys Arg  
275 280 285  
Phe Ala Thr Ser Glu Glu Leu Leu Ser His Leu Arg Thr His Thr Ala  
290 295 300  
Phe Pro Gly Thr Asp Lys Leu Leu Ser Gly Tyr Pro Ser Ser Ser Ser  
305 310 315 320  
Leu Ala Ser Ala Ala Ala Ala Ala Met Ala Cys His Met His Ile Pro  
325 330 335  
Thr Ser Gly Ala Pro Gly Ser Pro Gly Thr Leu Ala Leu Arg Ser Pro  
340 345 350  
His His Ala Leu Gly Leu Ser Ser Arg Tyr His Pro Tyr Ser Lys Ser  
355 360 365  
Pro Leu Pro Thr Pro Gly Ala Pro Val Pro Val Pro Ala Ala Thr Gly  
370 375 380  
Pro Tyr Tyr Ser Pro Tyr Ala Leu Tyr Gly Gln Arg Leu Thr Thr Ala  
385 390 395 400  
Ser Ala Leu Gly Tyr Gln  
405

&lt;210&gt; 2926

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2926

Met Ile Asp Ala Val Val Thr Ser Arg Ser Glu Asp Asp Glu Thr Lys  
 1 5 10 15  
 Glu Lys Gln Val Arg Asp Lys Arg Arg Lys Thr Leu Val Ile Ile Glu  
 20 25 30  
 Lys Thr Tyr Ser Leu Leu Leu Asp Val Glu Asp Tyr Glu Arg Arg Tyr  
 35 40 45  
 Leu Leu Ser Leu Glu Glu Glu Arg Pro Ala Leu Met Asp Asp Arg Lys  
 50 55 60  
 His Lys Ile Cys Ser Met Tyr Asp Asn Leu Arg Gly Lys Leu Pro Gly  
 65 70 75 80  
 Gln Glu Arg Pro Ser Asp Asp His Phe Val Gln Ile Met Cys Ile Arg  
 85 90 95  
 Lys Gly Lys Arg Met Val Ala Arg Ile Leu Pro Phe Leu Ser Thr Glu  
 100 105 110  
 Gln Ala Ala Asp Ile Leu Met Thr Thr Ala Arg Asn Leu Pro Phe Leu  
 115 120 125  
 Ile Lys Lys Asp Ala Gln Asp Glu Val Leu Pro Cys Leu Leu Ser Pro  
 130 135 140  
 Phe Ser Leu Leu Leu Tyr His Leu Pro Ser Val Ser Ile Thr Ser Leu  
 145 150 155 160  
 Leu Arg Gln Leu Met Asn Leu Pro Gln Ser Ala Ala Thr Pro Ala Leu  
 165 170 175  
 Ser Asn Pro His Leu Thr Ala Val Leu Gln Asn Lys Phe Gly Leu Ser  
 180 185 190  
 Leu Leu Leu Ile Leu Leu Ser Arg Gly Glu Asp Leu Gln Ser Ser Asp  
 195 200 205  
 Pro Ala Thr Glu Ser Thr Gln Asn Asn Gln Trp Thr Glu Val Met Phe  
 210 215 220  
 Met Ala Thr Arg Glu Leu Leu Arg Ile Pro Gln Ala Ala Leu Ala Lys

225                      230                      235                      240  
 Pro Ile Ser Ile Pro Thr Asn Leu Val Ser Leu Phe Ser Arg Tyr Val  
                          245                      250                      255  
 Asp Arg Gln Lys Leu Asn Leu Leu Glu Thr Lys Leu Gln Leu Val Gln  
                          260                      265                      270  
 Gly Ile Arg  
                          275

<210> 2927

<211> 1042

<212> PRT

<213> Homo sapiens

<400> 2927

Met Glu Ala Glu Asp Leu Ser Lys Ala Glu Asp Arg Asn Glu Asp Pro  
   1                      5                      10                      15  
 Gly Ser Lys Asn Glu Gly Gln Leu Ala Ala Val Gln Pro Asp Val Pro  
                          20                      25                      30  
 His Gly Gly Gln Ser Ser Ser Pro Thr Ala Leu Trp Asp Met Leu Glu  
                          35                      40                      45  
 Arg Lys Phe Leu Glu Tyr Gln Gln Leu Thr His Lys Ser Pro Ile Glu  
                          50                      55                      60  
 Arg Gln Lys Ser Leu Leu Ser Leu Leu Pro Leu Phe Leu Lys Ala Trp  
   65                      70                      75                      80  
 Glu His Ser Val Gly Ile Ile Cys Phe Pro Ser Leu Gln Arg Leu Ala  
                          85                      90                      95  
 Glu Asp Val Ser Asp Gln Leu Ala Gln Gln Leu Gln Lys Ala Leu Val  
                          100                      105                      110

Gly Lys Pro Ala Glu Gln Ala Arg Leu Ala Ala Gly Gln Leu Leu Trp  
115 120 125

Trp Lys Gly Asp Val Asp Gln Asp Gly Tyr Leu Leu Leu Lys Ser Val  
130 135 140

Tyr Val Leu Thr Gly Thr Asp Ser Glu Thr Leu Gly Arg Val Ala Glu  
145 150 155 160

Ser Gly Leu Pro Ala Leu Leu Leu Gln Cys Leu Tyr Leu Phe Phe Val  
165 170 175

Phe Pro Leu Asp Lys Asp Glu Leu Leu Glu Ser Asp Leu Gln Val Gln  
180 185 190

Lys Met Phe Val Gln Met Leu Leu Asn Ile Cys Ser Asp Ser Gln Gly  
195 200 205

Leu Glu Gly Leu Leu Pro Gly Ser Glu Leu Gln Ser Leu Leu Ile Ala  
210 215 220

Thr Thr Cys Leu Arg Glu His Ser Cys Cys Phe Trp Lys Glu Pro Thr  
225 230 235 240

Phe Cys Val Leu Arg Ala Ile Ser Lys Ala Gln Asn Leu Ser Ile Ile  
245 250 255

Gln Tyr Leu Gln Ala Thr Asp Cys Val Arg Leu Ser Leu Gln Asn Leu  
260 265 270

Ser Arg Leu Thr Asp Thr Leu Pro Ala Pro Glu Val Ser Glu Ala Val  
275 280 285

Ser Leu Ile Leu Gly Phe Val Lys Asp Ser Tyr Pro Val Ser Ser Ala  
290 295 300

Leu Phe Leu Glu Phe Glu Asn Ser Glu Gly Tyr Pro Leu Leu Leu Lys  
305 310 315 320

Val Leu Leu Arg Tyr Asp Gly Leu Thr Gln Ser Glu Val Asp Pro His  
325 330 335

Leu Glu Glu Leu Leu Gly Leu Val Val Trp Leu Thr Thr Cys Gly Arg

340 345 350  
Ser Glu Leu Lys Val Phe Asp Ser Ile Thr Tyr Pro Gln Leu Glu Gly  
355 360 365  
Phe Lys Phe His His Glu Ala Ser Gly Val Thr Val Lys Asn Leu Gln  
370 375 380  
Ala Phe Gln Val Leu Gln Asn Val Phe His Lys Ala Ser Asp Ser Val  
385 390 395 400  
Leu Cys Ile Gln Val Leu Ser Val Ile Arg Thr Met Trp Ala Trp Asn  
405 410 415  
Ala Arg Asn Phe Phe Leu Leu Glu Trp Thr Leu Gln Pro Ile Ser Gln  
420 425 430  
Phe Val Glu Ile Met Pro Leu Lys Pro Ala Pro Val Gln Glu His Phe  
435 440 445  
Phe Gln Leu Leu Glu Ala Leu Val Phe Glu Leu His Tyr Val Pro His  
450 455 460  
Glu Ile Leu Arg Lys Val Gln His Leu Ile Lys Glu Ser Pro Gly Pro  
465 470 475 480  
Ser Cys Thr Leu Met Ala Leu Gln Ser Ile Leu Ser Ile Ala Gly Gly  
485 490 495  
Asp Pro Leu Phe Thr Asp Ile Phe Arg Asp Ser Gly Leu Leu Gly Leu  
500 505 510  
Leu Leu Ala Gln Leu Arg Lys Gln Ala Lys Ile Met Arg Lys Ser Gly  
515 520 525  
Asn Lys Val Ser Thr Pro Gly Val Gln Asp Pro Glu Arg Glu Leu Thr  
530 535 540  
Cys Val Met Leu Arg Ile Val Val Thr Leu Leu Lys Gly Ser Val Arg  
545 550 555 560  
Asn Ala Val Val Leu Lys Asp His Gly Met Val Pro Phe Ile Lys Ile  
565 570 575

Phe Leu Asp Asp Glu Cys Tyr Arg Glu Ala Ser Leu Ser Ile Leu Glu  
580 585 590  
Gln Leu Ser Ala Ile Asn Ala Glu Glu Tyr Met Ser Ile Ile Val Gly  
595 600 605  
Ala Leu Cys Ser Ser Thr Gln Gly Glu Leu Gln Leu Lys Leu Asp Leu  
610 615 620  
Leu Lys Ser Leu Leu Arg Ile Leu Val Thr Pro Lys Gly Arg Ala Ala  
625 630 635 640  
Phe Arg Val Ser Ser Gly Phe Asn Gly Leu Leu Ser Leu Leu Ser Asp  
645 650 655  
Leu Glu Gly Ser Leu Gln Glu Pro Pro Leu Gln Ala Trp Gly Ala Val  
660 665 670  
Ser Pro Arg Gln Thr Leu Glu Leu Val Leu Tyr Thr Leu Cys Ala Val  
675 680 685  
Ser Ala Ala Leu His Trp Asp Pro Val Asn Gly Tyr Phe Phe Arg Arg  
690 695 700  
Asn Gly Leu Phe Glu Lys Leu Ala Glu Asp Leu Cys Leu Leu Gly Cys  
705 710 715 720  
Phe Gly Ala Leu Glu Glu Glu Gly Asn Leu Leu Arg Ser Trp Val Asp  
725 730 735  
Thr Lys Ala Arg Pro Phe Ala Asp Leu Leu Gly Thr Ala Phe Ser Ser  
740 745 750  
Ser Gly Ser Leu Pro Pro Arg Ile Gln Ser Cys Leu Gln Ile Leu Gly  
755 760 765  
Phe Leu Asp Ser Met Ala Ser Gly Thr Leu His Leu Arg Gly Asp Leu  
770 775 780  
Lys Glu Ser Leu Arg Thr Lys Gln Gly Pro Val Val Asp Val Gln Lys  
785 790 795 800  
Gly Glu Thr Gly Ser Asp Pro Gln Arg Asn Phe Lys Gln Trp Pro Asp

805	810	815
Leu Glu Glu Arg Met Asp Glu Gly Asp Ala Ala Ile Met His Pro Gly		
820	825	830
Val Val Cys Ile Met Val Arg Leu Leu Pro Arg Leu Tyr His Glu Asp		
835	840	845
His Pro Gln Leu Ser Glu Glu Ile Gln Cys Ser Leu Ala Ser His Ile		
850	855	860
Gln Ser Leu Val Lys Ser Glu Lys Asn Arg Gln Val Met Cys Glu Ala		
865	870	875
Gly Leu Leu Gly Thr Leu Met Ala Ser Cys His Arg Ala Leu Val Thr		
885	890	895
Ser Gly Ser Pro Leu His Ser Arg Leu Ile Arg Ile Phe Glu Lys Leu		
900	905	910
Ala Ser Gln Ala Ile Glu Pro Asp Val Leu Arg Gln Phe Leu Gly Leu		
915	920	925
Gly Ile Pro Ser Ser Leu Ser Ala Thr Thr Lys Ile Leu Asp Ser Ser		
930	935	940
His Thr His Arg Gly Asn Pro Gly Cys Ser Gly Ser Gln Thr Ala Gln		
945	950	955
Gly Leu Ala Glu Gly Pro Trp Pro Ala Ala Pro Asp Ala Gly Leu His		
965	970	975
Pro Gly Val Thr Gln Ala Pro Gln Pro Leu Gly Glu Ser Gln Asp Ser		
980	985	990
Thr Thr Ala Leu Gln Thr Ala Leu Ser Leu Ile Ser Met Thr Phe Pro		
995	1000	1005
Ala Cys Trp Lys Pro Asn Ile Trp Lys Asp Asn Leu Ala Gln Lys Pro		
1010	1015	1020
Val Ala Gly Asp Ala Ala Gln Cys Asn Ile Phe Pro Pro Ala Ser Ser		
1025	1030	1035
		1040

Val Leu

<210> 2928

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2928

Met	Arg	Lys	Tyr	Phe	Asp	Ile	Cys	Val	Lys	Gln	Ser	Leu	Val	Pro	Cys
1				5					10				15		
Ser	Ser	Asp	Phe	Lys	His	Ile	Ser	Leu	Thr	Glu	Met	Ala	Asn	Gly	Thr
				20				25					30		
Leu	Gly	Ser	Leu	Trp	Gly	Val	Gly	Arg	Arg	Phe	His	Cys	Ala	Arg	Pro
				35				40					45		
Arg	His	Cys	Gly	Thr	Ser	Asn	Ile	Pro	Gly	Ser	Gln	Pro	Phe	His	Ala
				50				55					60		
Arg	Gly	Ile	Ser	Leu	Ser	Leu	Ser	Gln	Pro	Lys	Val	Ala	Pro	Gly	Phe
				65				70					75		80
His	Ser	Val	Pro	Glu	Gly	Ala	Leu	Ala	Thr	Ser	Leu	Arg	Asn	Thr	Arg
								85					90		95
Leu	Asp	Val	Gly	Leu	Thr	Thr	His	Gly	Arg						
								100					105		

<210> 2929

<211> 497

<212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2929

Met Gly Ser Leu Glu Met Val Pro Met Gly Ala Gly Pro Pro Ser Pro  
1 5 10 15  
Gly Gly Asp Pro Asp Gly Tyr Asp Gly Gly Asn Asn Ser Gln Tyr Pro  
20 25 30  
Ser Ala Ser Gly Ser Ser Gly Asn Thr Pro Thr Pro Pro Asn Asp Glu  
35 40 45  
Glu Arg Glu Ser Asn Glu Glu Pro Pro Pro Tyr Glu Asp Pro Tyr  
50 55 60  
Trp Gly Asn Gly Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln  
65 70 75 80  
Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu  
85 90 95  
Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile Tyr  
100 105 110  
Glu Glu Ala Gly Arg Gly Ser Met Asn Pro Val Cys Leu Pro Val Ile  
115 120 125  
Val Ala Pro Tyr Leu Phe Trp Leu Ala Ala Ile Ala Ala Ser Cys Phe  
130 135 140  
Thr Ala Ser Val Ser Thr Val Val Thr Ala Thr Gly Leu Ala Leu Ser  
145 150 155 160  
Leu Leu Leu Leu Ala Ala Val Ala Ser Ser Tyr Ala Ala Ala Gln Arg  
165 170 175  
Lys Leu Leu Thr Pro Val Thr Val Leu Thr Ala Val Val Thr Phe Phe  
180 185 190  
Ala Ile Cys Leu Thr Trp Arg Ile Glu Asp Pro Pro Phe Asn Ser Leu  
195 200 205

Leu Phe Ala Leu Leu Ala Ala Ala Gly Gly Leu Gln Gly Ile Tyr Val  
210 215 220  
Leu Val Met Leu Val Leu Leu Ile Leu Ala Tyr Arg Arg Arg Trp Arg  
225 230 235 240  
Arg Leu Thr Val Cys Gly Gly Ile Met Phe Leu Ala Cys Val Leu Val  
245 250 255  
Leu Ile Val Asp Ala Val Leu Gln Leu Ser Pro Leu Leu Gly Ala Val  
260 265 270  
Thr Val Val Ser Met Thr Leu Leu Leu Leu Ala Phe Val Leu Trp Leu  
275 280 285  
Ser Ser Pro Gly Gly Leu Gly Thr Leu Gly Ala Ala Leu Leu Thr Leu  
290 295 300  
Ala Ala Ala Leu Ala Leu Leu Ala Ser Leu Ile Leu Gly Thr Leu Asn  
305 310 315 320  
Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp Thr Leu Val Val Leu  
325 330 335  
Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu  
340 345 350  
Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala Ser Ala  
355 360 365  
Leu Ile Ala Gly Gly Ser Ile Leu Gln Thr Asn Phe Lys Ser Leu Ser  
370 375 380  
Ser Thr Glu Phe Ile Pro Asn Leu Phe Cys Met Leu Leu Leu Ile Val  
385 390 395 400  
Ala Gly Ile Leu Phe Ile Leu Ala Ile Leu Thr Glu Trp Gly Ser Gly  
405 410 415  
Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Leu Gly Gly Leu Leu Thr  
420 425 430  
Met Val Ala Gly Ala Val Trp Leu Thr Val Met Ser Asn Thr Leu Leu

435                      440                      445  
 Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu Ile Phe Leu Ile Gly Phe  
 450                      455                      460  
 Ala Leu Phe Gly Val Ile Arg Cys Cys Arg Tyr Cys Cys Tyr Tyr Cys  
 465                      470                      475                      480  
 Leu Thr Leu Glu Ser Glu Glu Arg Pro Pro Thr Pro Tyr Arg Asn Thr  
 485                      490                      495  
 Val

<210> 2930

<211> 470

<212> PRT

<213> Homo sapiens

<400> 2930

Met Pro Thr Thr Pro Val Lys Ala Lys Arg Val Ser Thr Phe Gln Glu  
 1                      5                      10                      15  
 Phe Glu Ser Asn Thr Ser Asp Ala Trp Asp Ala Gly Glu Asp Asp Asp  
 20                      25                      30  
 Glu Leu Leu Ala Met Ala Ala Glu Ser Leu Asn Ser Glu Val Val Met  
 35                      40                      45  
 Glu Thr Ala Asn Arg Val Leu Arg Asn His Ser Gln Arg Gln Gly Arg  
 50                      55                      60  
 Pro Thr Leu Gln Glu Gly Pro Gly Leu Gln Gln Lys Pro Arg Pro Glu  
 65                      70                      75                      80  
 Ala Glu Pro Pro Ser Pro Pro Ser Gly Asp Leu Arg Leu Val Lys Ser  
 85                      90                      95

Val Ser Glu Ser His Thr Ser Cys Pro Ala Glu Ser Ala Ser Asp Ala  
100 105 110  
Ala Pro Leu Gln Arg Ser Gln Ser Leu Pro His Ser Ala Thr Val Thr  
115 120 125  
Leu Gly Gly Thr Ser Asp Pro Ser Thr Leu Ser Ser Ser Ala Leu Ser  
130 135 140  
Glu Arg Glu Ala Ser Arg Leu Asp Lys Phe Lys Gln Leu Leu Ala Gly  
145 150 155 160  
Pro Asn Thr Asp Leu Glu Glu Leu Arg Arg Leu Ser Trp Ser Gly Ile  
165 170 175  
Pro Lys Pro Val Arg Pro Met Thr Trp Lys Leu Leu Ser Gly Tyr Leu  
180 185 190  
Pro Ala Asn Val Asp Arg Arg Pro Ala Thr Leu Gln Arg Lys Gln Lys  
195 200 205  
Glu Tyr Phe Ala Phe Ile Glu His Tyr Tyr Asp Ser Arg Asn Asp Glu  
210 215 220  
Val His Gln Asp Thr Tyr Arg Gln Ile His Ile Asp Ile Pro Arg Met  
225 230 235 240  
Ser Pro Glu Ala Leu Ile Leu Gln Pro Lys Val Thr Glu Ile Phe Glu  
245 250 255  
Arg Ile Leu Phe Ile Trp Ala Ile Arg His Pro Ala Ser Gly Tyr Val  
260 265 270  
Gln Gly Ile Asn Asp Leu Val Thr Pro Phe Phe Val Val Phe Ile Cys  
275 280 285  
Glu Tyr Ile Glu Ala Glu Glu Val Asp Thr Val Asp Val Ser Gly Val  
290 295 300  
Pro Ala Glu Val Leu Cys Asn Ile Glu Ala Asp Thr Tyr Trp Cys Met  
305 310 315 320  
Ser Lys Leu Leu Asp Gly Ile Gln Asp Asn Tyr Thr Phe Ala Gln Pro

325	330	335	
Gly Ile Gln Met Lys Val Lys Met Leu Glu Glu Leu Val Ser Arg Ile			
340	345	350	
Asp Glu Gln Val His Arg His Leu Asp Gln His Glu Val Arg Tyr Leu			
355	360	365	
Gln Phe Ala Phe Arg Trp Met Asn Asn Leu Leu Met Arg Glu Val Pro			
370	375	380	
Leu Arg Cys Thr Ile Arg Leu Trp Asp Thr Tyr Gln Ser Glu Pro Asp			
385	390	395	400
Gly Phe Ser His Phe His Leu Tyr Val Cys Ala Ala Phe Leu Val Arg			
405	410	415	
Trp Arg Lys Glu Ile Leu Glu Glu Lys Asp Phe Gln Glu Leu Leu Leu			
420	425	430	
Phe Leu Gln Asn Leu Pro Thr Ala His Trp Asp Asp Glu Asp Ile Ser			
435	440	445	
Leu Leu Leu Ala Glu Ala Tyr Arg Leu Lys Phe Ala Phe Ala Asp Ala			
450	455	460	
Pro Asn His Tyr Lys Lys			
465	470		

&lt;210&gt; 2931

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2931

Met Glu Tyr Thr Val His Val Trp Ala Gln Lys Gly Asn Gln Glu Ser

1

5

10

15

Lys Lys Ala Asp Thr Lys Ala Gln Thr Glu Ile Asp Gly Pro Lys Asn  
 20 25 30  
 Leu Val Thr Asp Trp Val Thr Glu Asn Met Ala Thr Val Ser Trp Asp  
 35 40 45  
 Pro Val Gln Ala Thr Ile Asp Lys Tyr Met Val Arg Tyr Thr Ser Ala  
 50 55 60  
 Asp Gly Glu Thr Arg Glu Val Leu Val Gly Lys Glu His Ser Ser Thr  
 65 70 75 80  
 Val Leu Thr Gly Leu Arg Pro Gly Met Glu Tyr Met Val His Val Trp  
 85 90 95  
 Ala Gln Lys Gly Ala Gln Glu Ser Lys Lys Ala Asp Thr Lys Ala Gln  
 100 105 110  
 Thr Glu Leu Asp Pro Pro Arg Asn Leu Arg Pro Ser Ala Val Thr Gln  
 115 120 125  
 Ser Gly Gly Ile Leu Thr Trp Thr Pro Pro Ser Ala Gln Ile His Gly  
 130 135 140  
 Tyr Ile Leu Thr Tyr Gln Phe Pro Asp Gly Thr Val Lys Glu Met Gln  
 145 150 155 160  
 Leu Gly Arg Glu Asp Gln Arg Phe Ala Leu Gln Gly Leu Glu Gln Gly  
 165 170 175  
 Ala Thr Tyr Pro Val Ser Leu Val Ala Phe Lys Gly Gly Arg Arg Ser  
 180 185 190  
 Arg Asn Val Ser Thr Thr Leu Ser Thr Val Gly Ala Arg Phe Pro His  
 195 200 205  
 Pro Ser Asp Cys Ser Gln Val Gln Gln Asn Ser Asn Ala Ala Ser Gly  
 210 215 220  
 Leu Tyr Thr Ile Tyr Leu His Gly Asp Ala Ser Arg Pro Leu Gln Val  
 225 230 235 240  
 Tyr Cys Asp Met Glu Thr Asp Gly Gly Gly Trp Ile Val Phe Gln Arg

245	250	255
Arg Asn Thr Gly Gln Leu Asp Phe Phe Lys Arg Trp Arg Ser Tyr Val		
260	265	270
Glu Gly Phe Gly Asp Pro Met Lys Glu Phe Trp Leu Gly Leu Asp Lys		
275	280	285
Leu His Asn Leu Thr Thr Gly Thr Pro Ala Arg Tyr Glu Val Arg Val		
290	295	300
Asp Leu Gln Thr Ala Asn Glu Ser Ala Tyr Ala Ile Tyr Asp Phe Phe		
305	310	315
Gln Val Ala Ser Ser Lys Glu Arg Tyr Lys Leu Thr Val Gly Lys Tyr		
325	330	335
Arg Gly Thr Ala Gly Asp Ala Leu Thr Tyr His Asn Gly Trp Lys Phe		
340	345	350
Thr Thr Phe Asp Arg Asp Asn Asp Ile Ala Leu Ser Asn Cys Ala Leu		
355	360	365
Thr His His Gly Gly Trp Trp Tyr Lys Asn Cys His Leu Ala Asn Pro		
370	375	380
Asn Gly Arg Tyr Gly Glu Thr Lys His Ser Glu Gly Val Asn Trp Glu		
385	390	395
Pro Trp Lys Gly His Glu Phe Ser Ile Pro Tyr Val Glu Leu Lys Ile		
405	410	415
Arg Pro His Gly Tyr Ser Arg Glu Pro Val Leu Gly Arg Lys Lys Arg		
420	425	430
Thr Leu Arg Gly Arg Leu Arg Thr Phe		
435	440	

&lt;210&gt; 2932

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2932

Met Leu Glu Val Pro Leu Gly Val Ser Val Ser Pro Arg Ala Gly His

1 5 10 15

Ile Pro Lys Glu Asp Phe Ser Leu Pro Ala Trp Arg Asp Arg Arg Thr

20 25 30

Ser Pro Cys Glu Leu Ile Leu Ser Pro Pro Leu Asp Val Trp Cys Val

35 40 45

Met Ser Cys Lys Pro Val Leu Cys Leu Thr Arg Gly Leu Gln Leu Arg

50 55 60

Gly Trp Thr Pro Ser Cys Leu Phe Ala Gln Cys Ser Thr Ser Pro Leu

65 70 75 80

His Leu Cys Leu Thr Leu Cys Cys Leu Phe Pro Thr Phe Gly Gly Phe

85 90 95

Trp Gly Pro Gly Leu Ala Val Leu Gly Phe Ser His Cys Trp Leu Arg

100 105 110

Leu Ala Ser Ser Val Val His Leu His Val Ser Phe

115 120

&lt;210&gt; 2933

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2933

Met Phe Ile Pro Asn Ala Arg Ser Gly Arg Gly Gly Arg Val Ala Val



1	5	10	15
Arg Leu Ser Gln Gln Pro Pro Trp His Leu Gly Thr Val Ala Ser Ser			
20	25	30	
Val Ser Ala Tyr Arg Leu Pro His Leu Thr Arg Gly Leu Gly Ala Arg			
35	40	45	
Glu Ala Asn Gln Val Pro Glu Leu Thr Asp Ser Phe Arg Pro Pro Ala			
50	55	60	
Ser Ser Leu Arg Pro Pro Thr Ser Ser Leu His Pro Pro Thr Ser Ser			
65	70	75	80
Leu Arg Pro Pro Thr Ser Ser Leu Cys Pro Ala Thr Ser Ser Pro Leu			
85	90	95	
Pro Ser Asn Leu Leu Pro Pro Pro Ser Ile Ser Ser Leu Cys Pro Ala			
100	105	110	
Ser Ser Ser Pro Pro Pro Ser Asn Leu Leu Pro Pro Pro Ser Asn Leu			
115	120	125	
Leu Pro Pro Pro Ser Asn Leu Leu Pro Pro Pro Ser Ala Leu Leu Pro			
130	135	140	
Leu Pro Ser Ser Val Leu Pro Pro Pro Ser Thr Leu Phe Pro Pro Ser			
145	150	155	160
Thr Ser Ser Leu Leu Pro Pro Pro Ser Ser Phe Tyr Pro Leu Pro Ser			
165	170	175	
Ala Leu Phe Phe Cys Pro Pro Pro Ser Thr Leu Phe Pro Pro Ser Ser			
180	185	190	
Leu His Pro Leu Pro Ser Ser Leu Tyr Pro Leu Pro Ser Ser Leu Arg			
195	200	205	
Leu Ile Trp Asn Arg Gly Leu Gly Pro Gly Leu Glu Ala Asp Pro Gly			
210	215	220	
Pro Gly Glu Val Lys Gly Thr Ala Gly Gly Arg His His Asp Val Leu			
225	230	235	240

Lys Leu Val Ala Pro Gly Ala Val Gly Arg Leu Lys Ala Glu Thr Val

245

250

255

Thr Ala Pro Ala Ala Met Glu Gly Asp Asp

260

265

<210> 2934

<211> 626

<212> PRT

<213> Homo sapiens

<400> 2934

Met Val Gly Ser Ser Ser Thr Arg Glu Lys Ala Ser Thr Val Leu Ser

1

5

10

15

Gln Ile Val Ala Ser Ile Gln Pro Pro Gln Phe Pro Pro Glu Thr Pro

20

25

30

Gln Ser Gly Pro Lys Ala Cys Ser Val Glu Glu Leu Tyr Ala Ile Pro

35

40

45

Pro Asp Ala Asp Val Ala Lys Ser Thr Pro Lys Ser Thr Pro Val Arg

50

55

60

Pro Lys Ser Leu Phe Thr Ser Gln Pro Ser Gly Glu Ala Glu Ala Pro

65

70

75

80

Gln Thr Thr Asp Ser Pro Thr Thr Lys Val Gln Lys Asp Pro Ser Ile

85

90

95

Lys Pro Val Thr Pro Ser Pro Ser Lys Leu Val Thr Ser Pro Gln Ser

100

105

110

Glu Pro Pro Ala Pro Phe Pro Pro Pro Arg Ser Thr Ser Ser Pro Tyr

115

120

125

His Ala Gly Asn Leu Leu Gln Arg His Phe Thr Asn Trp Thr Lys Pro

130 135 140  
Thr Ser Pro Thr Arg Ser Thr Glu Ala Glu Ser Val Leu His Ser Glu  
145 150 155 160  
Gly Ser Arg Arg Ala Ala Asp Ala Lys Pro Lys Arg Trp Ile Ser Phe  
165 170 175  
Lys Ser Phe Phe Arg Arg Arg Lys Thr Asp Glu Glu Asp Asp Lys Glu  
180 185 190  
Lys Glu Arg Glu Lys Gly Lys Leu Val Gly Leu Asp Gly Thr Val Ile  
195 200 205  
His Met Leu Pro Pro Pro Pro Val Gln Arg His His Trp Phe Thr Glu  
210 215 220  
Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala Ile Val Phe Met Tyr Arg  
225 230 235 240  
Cys Asp Pro Ala Gln Gly Gln Leu Ser Val Asp Gln Ser Lys Ala Arg  
245 250 255  
Thr Asp Gln Ala Ala Val Met Glu Lys Gly Arg Ala Glu Asn Ala Leu  
260 265 270  
Leu Gln Asp Ser Glu Lys Lys Arg Ser His Ser Ser Pro Ser Gln Ile  
275 280 285  
Pro Lys Lys Ile Leu Ser His Met Thr His Glu Val Thr Glu Asp Phe  
290 295 300  
Ser Pro Arg Asp Pro Arg Thr Val Val Gly Lys Gln Asp Gly Arg Gly  
305 310 315 320  
Cys Thr Ser Val Thr Thr Ala Leu Ser Leu Pro Glu Leu Glu Arg Glu  
325 330 335  
Asp Gly Lys Glu Asp Ile Ser Asp Pro Met Asp Pro Asn Pro Cys Ser  
340 345 350  
Ala Thr Tyr Ser Asn Leu Gly Gln Ser Arg Ala Ala Met Ile Pro Pro  
355 360 365

Lys Gln Pro Arg Gln Pro Lys Gly Ala Val Asp Asp Ala Ile Ala Phe  
370 375 380  
Gly Gly Lys Thr Asp Gln Glu Ala Pro Asn Ala Ser Gln Pro Thr Pro  
385 390 395 400  
Pro Pro Leu Pro Lys Lys Met Ile Ile Arg Ala Asn Thr Glu Pro Ile  
405 410 415  
Ser Lys Asp Leu Gln Lys Ser Met Glu Ser Ser Leu Cys Val Met Ala  
420 425 430  
Asn Pro Thr Tyr Asp Ile Asp Pro Asn Trp Asp Ala Ser Ser Ala Gly  
435 440 445  
Ser Ser Ile Ser Tyr Glu Leu Lys Gly Leu Asp Ile Glu Ser Tyr Asp  
450 455 460  
Ser Leu Glu Arg Pro Leu Arg Lys Glu Arg Pro Val Pro Ser Ala Ala  
465 470 475 480  
Asn Ser Ile Ser Ser Leu Thr Thr Leu Ser Ile Lys Asp Arg Phe Ser  
485 490 495  
Asn Ser Met Glu Ser Leu Ser Ser Arg Arg Gly Pro Ser Cys Arg Gln  
500 505 510  
Gly Arg Gly Ile Gln Lys Pro Gln Arg Gln Ala Leu Tyr Arg Gly Leu  
515 520 525  
Glu Asn Arg Glu Glu Val Val Gly Lys Ile Arg Ser Leu His Thr Asp  
530 535 540  
Ala Leu Lys Lys Leu Ala Val Lys Cys Glu Asp Leu Phe Met Ala Gly  
545 550 555 560  
Gln Lys Asp Gln Leu Arg Phe Gly Val Asp Ser Trp Ser Asp Phe Arg  
565 570 575  
Leu Thr Ser Asp Lys Pro Cys Cys Glu Ala Gly Asp Ala Val Tyr Tyr  
580 585 590  
Thr Ala Ser Tyr Ala Lys Asp Pro Leu Asn Asn Tyr Ala Val Lys Ile

595                      600                      605  
 Cys Lys Ser Lys Ala Lys Glu Ser Gln Gln Tyr Tyr His Ser Ser Gln  
 610                      615                      620  
 Glu Phe  
 625

<210> 2935

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2935

Met Phe Met Tyr Tyr Thr Glu Pro Ser Gly Cys His Glu Gly Lys Val  
 1                      5                      10                      15  
 Phe Ile Ser Leu Asn Leu Thr Phe Cys Val Cys Val Ser Ile Ala Ala  
 20                      25                      30  
 Val Leu Pro Lys Val Gln Asp Ala Gln Pro Asn Ser Gly Leu Leu Gln  
 35                      40                      45  
 Ala Ser Val Ile Thr Leu Tyr Thr Met Phe Val Thr Trp Ser Ala Leu  
 50                      55                      60  
 Ser Ser Ile Pro Glu Gln Lys Cys Asn Pro His Leu Pro Thr Gln Leu  
 65                      70                      75                      80  
 Gly Asn Glu Thr Val Val Ala Gly Pro Glu Gly Tyr Glu Thr Gln Trp  
 85                      90                      95  
 Trp Asp Ala Pro Ser Ile Val Gly Leu Ile Ile Phe Leu Leu Cys Thr  
 100                      105                      110  
 Leu Phe Ile Ser Leu Arg Ser Ser Asp His Arg Gln Val Asn Ser Leu  
 115                      120                      125

Met Gln Thr Glu Glu Cys Pro Pro Met Leu Asp Ala Thr Gln Gln Gln  
 130 135 140

Gln Gln Val Ala Ala Cys Glu Gly Arg Ala Phe Asp Asn Glu Gln Asp  
 145 150 155 160

Gly Val Thr Tyr Ser Tyr Ser Phe Phe His Phe Cys Leu Val Leu Ala  
 165 170 175

Ser Leu His Val Met Met Thr Leu Thr Asn Trp Tyr Lys Pro Gly Glu  
 180 185 190

Thr Arg Lys Met Ile Ser Thr Trp Thr Ala Val Trp Val Lys Ile Cys  
 195 200 205

Ala Ser Trp Ala Gly Leu Leu Leu Tyr Leu Trp Thr Leu Val Ala Pro  
 210 215 220

Leu Leu Leu Arg Asn Arg Asp Phe Ser  
 225 230

<210> 2936

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2936

Met Ile Ser Gln Pro Arg Lys Lys Ile His Trp Lys Leu Gly Arg Glu  
 1 5 10 15

Ala Ala Ala Pro Pro Arg Ala Arg Ala Pro Gly Arg Arg Glu Asp Ser  
 20 25 30

Arg Thr Ala Ala Leu Ser Ser His Pro Gln Ser Leu Trp Thr Ala Leu  
 35 40 45

Ala Thr Ala Lys Ser Trp Asp Asn Thr Ser Leu His Gly Lys Val Thr

50                      55                      60  
 Val Asp Ser Pro Gly Ser Arg Met Gln Pro Gln Arg Leu Val Ala Val  
 65                      70                      75                      80  
 Ser Cys Pro Leu Val Gly Asp Gly Pro Trp Leu Arg Gln Arg Glu Met  
                          85                      90                      95  
 Val Arg Leu Leu Gln Gly  
                          100

<210> 2937

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2937

Met Ala Gly Asp Val Gly Gly Arg Ser Cys Thr Asp Ser Glu Leu Leu  
 1                      5                      10                      15  
 Leu His Pro Glu Leu Leu Ser Gln Glu Phe Leu Leu Leu Thr Leu Glu  
                          20                      25                      30  
 Gln Lys Asn Ile Ala Val Glu Thr Asp Val Arg Val Asn Lys Asp Ser  
                          35                      40                      45  
 Leu Thr Asp Leu Tyr Val Gln His Ala Ile Pro Leu Pro Gln Arg Asp  
                          50                      55                      60  
 Leu Pro Lys Asn Arg Trp Gly Lys Met Met Glu Lys Lys Arg Glu Gln  
 65                      70                      75                      80  
 His Glu Ile Lys Asn Glu Thr Lys Arg Ser Ser Thr Val Asp Gly Leu  
                          85                      90                      95  
 Arg Lys Arg Pro Leu Ile Val Phe Asp Gly Ser Ser Thr Ser Thr Ser  
                          100                      105                      110

Ile Lys Val Lys Lys Thr Glu Asn Gly Asp Asn Asp Arg Leu Lys Pro  
 115 120 125  
 Pro Pro Gln Ala Ser Phe Thr Ser Asn Ala Phe Arg Lys Leu Ser Asn  
 130 135 140  
 Ser Ser Ser Ser Val Ser Pro Leu Ile Leu Ser Ser Asn Leu Pro Val  
 145 150 155 160  
 Asn Asn Lys Thr Glu His Asn Asn Asn Asp Ala Lys Gln Asn His Asp  
 165 170 175  
 Leu Thr His Arg Lys Ser Pro Ser Asp Pro Val Lys Ser Pro Pro Leu  
 180 185 190  
 Ser Pro Val Gly Thr Thr Pro Val Lys Leu Lys Arg Ala Ala Pro Lys  
 195 200 205  
 Glu Glu Ala Glu Ala Met Asn Asn Leu Lys Pro Pro Gln Ala Lys Arg  
 210 215 220  
 Lys Ile Gln His Val Thr Trp Pro  
 225 230

<210> 2938

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2938

Met Leu Phe Leu Cys Pro Leu Tyr Tyr Ser Asn Tyr His Phe Asn Lys  
 1 5 10 15  
 Asn Trp Phe Ala His Tyr Ser Leu Lys Ser Val Gly Leu Phe His Thr  
 20 25 30  
 Ala Ile Val Thr Asp His Phe Ser Leu His Leu Thr Tyr Ile Val Asn



35                      40                      45  
 Cys Lys Gln Ser Glu Pro Leu Leu Thr Pro Ser Trp Ile Lys Tyr Phe  
 50                      55                      60  
 Gln Met Gly Asn Cys Glu His Leu Arg Lys Val Ile Leu Ser Val Gly  
 65                      70                      75                      80  
 Ile Arg Asn Thr His Pro Glu Glu Leu Leu Lys Ile Cys Ile His Val  
 85                      90                      95  
 Leu His Pro Arg Gln Val Tyr Phe Gln Ser  
 100                      105

<210> 2939

<211> 571

<212> PRT

<213> Homo sapiens

<400> 2939

Met Pro Tyr Glu Ile Lys Lys Val Phe Ala Ser Leu Pro Gln Val Glu  
 1                      5                      10                      15  
 Arg Gly Val Ser Lys Ile Ile Gly Gly Asp Pro Lys Gly Asn Asn Phe  
 20                      25                      30  
 Leu Tyr Thr Asn Gly Lys Cys Val Ile Leu Arg Asn Ile Asp Asn Pro  
 35                      40                      45  
 Ala Leu Ala Asp Ile Tyr Thr Glu His Ala His Gln Val Val Val Ala  
 50                      55                      60  
 Lys Tyr Ala Pro Ser Gly Phe Tyr Ile Ala Trp Thr Glu Asp Ser Lys  
 65                      70                      75                      80  
 Arg Ile Ala Val Val Gly Glu Gly Arg Glu Lys Phe Gly Ala Val Phe  
 85                      90                      95

Leu Trp Asp Ser Gly Ser Ser Val Gly Glu Ile Thr Gly His Asn Lys  
100 105 110  
Val Ile Asn Ser Val Asp Ile Lys Gln Ser Arg Pro Tyr Arg Leu Ala  
115 120 125  
Thr Gly Ser Asp Asp Asn Cys Ala Ala Phe Phe Glu Gly Pro Pro Phe  
130 135 140  
Lys Phe Lys Phe Thr Ile Gly Asp His Ser Arg Phe Val Asn Cys Val  
145 150 155 160  
Arg Phe Ser Pro Asp Gly Asn Arg Phe Ala Thr Ala Ser Ala Asp Gly  
165 170 175  
Gln Ile Tyr Ile Tyr Asp Gly Lys Thr Gly Glu Lys Val Cys Ala Leu  
180 185 190  
Gly Gly Ser Lys Ala His Asp Gly Gly Ile Tyr Ala Ile Ser Trp Ser  
195 200 205  
Pro Asp Ser Thr His Leu Leu Ser Ala Ser Gly Asp Lys Thr Ser Lys  
210 215 220  
Ile Trp Asp Val Ser Val Asn Ser Val Val Ser Thr Phe Pro Met Gly  
225 230 235 240  
Ser Thr Val Leu Asp Gln Gln Leu Gly Cys Leu Trp Gln Lys Asp His  
245 250 255  
Leu Leu Ser Val Ser Leu Ser Gly Tyr Ile Asn Tyr Leu Asp Arg Asn  
260 265 270  
Asn Pro Ser Lys Pro Leu His Val Ile Lys Gly His Ser Lys Ser Ile  
275 280 285  
Gln Cys Leu Thr Val His Lys Asn Gly Gly Lys Ser Tyr Ile Tyr Ser  
290 295 300  
Gly Ser His Asp Gly His Ile Asn Tyr Trp Asp Ser Glu Thr Gly Glu  
305 310 315 320  
Asn Asp Ser Phe Ala Gly Lys Gly His Thr Asn Gln Val Ser Arg Met

325	330	335
Thr Val Asp Glu Ser Gly Gln Leu Ile Ser Cys Ser Met Asp Asp Thr		
340	345	350
Val Arg Tyr Thr Ser Leu Met Leu Arg Asp Tyr Ser Gly Gln Gly Val		
355	360	365
Val Lys Leu Gly Val Gln Pro Lys Cys Val Ala Val Gly Pro Gly Gly		
370	375	380
Tyr Ala Val Val Val Cys Ile Gly Gln Ile Val Leu Leu Lys Asp Gln		
385	390	395
Arg Lys Cys Phe Ser Ile Asp Asn Pro Gly Tyr Glu Pro Glu Val Val		
405	410	415
Ala Val His Pro Gly Gly Asp Thr Val Ala Ile Gly Gly Val Asp Gly		
420	425	430
Asn Val Arg Leu Tyr Ser Ile Leu Gly Thr Thr Leu Lys Asp Glu Gly		
435	440	445
Lys Leu Leu Glu Ala Lys Gly Pro Val Thr Asp Val Ala Tyr Ser His		
450	455	460
Asp Gly Ala Phe Leu Ala Val Cys Asp Ala Ser Lys Val Val Thr Val		
465	470	475
Phe Ser Val Ala Asp Gly Tyr Ser Glu Asn Asn Val Phe Tyr Gly His		
485	490	495
His Ala Lys Ile Val Cys Leu Ala Trp Ser Pro Asp Asn Glu His Phe		
500	505	510
Ala Ser Gly Gly Met Asp Met Met Val Tyr Val Trp Thr Leu Ser Asp		
515	520	525
Pro Glu Thr Arg Val Lys Ile Gln Asp Ala His Arg Leu His His Val		
530	535	540
Ser Ser Leu Ala Trp Leu Asp Glu His Thr Leu Val Thr Thr Ser His		
545	550	555
		560

Asp Ala Ser Val Lys Glu Trp Thr Ile Thr Tyr

565

570

<210> 2940

<211> 155

<212> PRT

<213> Homo sapiens

<400> 2940

Met Ala Ala Gly Arg Ala Arg Ala Gly Ser Leu Arg Gln Trp Ala Leu

1

5

10

15

Thr Gln Leu Ala Arg Ala Gly Thr Ser Ser Ser Leu Leu Gly Arg Met

20

25

30

Leu Leu Pro Leu Gln Pro Ala Thr Gly Cys Pro Arg Ser Pro His Gln

35

40

45

Leu Gly Trp Ala Ala Glu Arg Arg Pro Ser Gly Arg Cys Glu Glu Arg

50

55

60

Gly Phe Leu Cys Ser His Leu Leu Cys Arg His Phe Ser Arg Arg Gly

65

70

75

80

Pro Val Phe Pro Gly Ser Pro Val Val Ala Val Leu Leu Gly Pro Gly

85

90

95

Ser Leu Phe Cys Leu Leu Gly Thr Pro Cys Pro Trp Asp Trp Thr Gly

100

105

110

Cys Val Leu His Thr Val Phe Leu Trp Ser His Phe Glu Phe Gly Gln

115

120

125

Ile Ser Leu Gln Gly Phe Cys Phe Glu Cys Gln Leu Arg Ala Leu Ser

130

135

140

Pro Ala Glu Ser Val Arg Cys Ser Trp Val His

145

150

155

&lt;210&gt; 2941

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2941

Met Ile Ile Cys Pro Ser Arg Ile Thr Leu Lys Pro Pro Asn Ser Phe

1

5

10

15

His Ser Ser Tyr Pro Gly Ala Ile Gln Gly Cys Cys Glu Thr Gly Phe

20

25

30

Lys Asp Gly Asp Leu Phe Met Ser Tyr Arg Ser Met Phe Gln Asp Val

35

40

45

Arg Asp Ala Val Asp Trp Val His Tyr Lys Gly Ser Leu Lys Glu Lys

50

55

60

Thr Val Glu Asn Leu Glu Lys Tyr Val Val Lys Asp Gly Lys Leu Pro

65

70

75

80

Leu Leu Leu Ser Arg Met Lys Glu Val Gly Lys Val Phe Leu Ala Thr

85

90

95

Asn Ser Asp Tyr Lys Tyr Thr Asp Lys Ile Met Thr Tyr Leu Phe Asp

100

105

110

Phe Pro His Gly Pro Lys Pro Gly Ser Ser His Arg Pro Trp Gln Ser

115

120

125

Tyr Phe Asp Leu Ile Leu Val Asp Ala Arg Lys Pro Leu Phe Phe Gly

130

135

140

Glu Gly Thr Val Leu Arg Gln Val Asp Thr Lys Thr Gly Lys Leu Lys

145

150

155

160

Ile Gly Thr Tyr Thr Gly Pro Leu Gln His Gly Ile Val Tyr Ser Gly  
 165 170 175  
 Gly Ser Ser Asp Thr Ile Cys Asp Leu Leu Gly Ala Lys Gly Lys Asp  
 180 185 190  
 Ile Leu Tyr Ile Gly Asp His Ile Phe Gly Asp Ile Leu Lys Ser Lys  
 195 200 205  
 Lys Arg Gln Gly Trp Arg Thr Phe Leu Val Ile Pro Glu Leu Ala Gln  
 210 215 220  
 Glu Leu His Val Trp Thr Asp Lys Ser Ser Leu Phe Glu Glu Leu Gln  
 225 230 235 240  
 Ser Leu Asp Ile Phe Leu Ala Glu Leu Tyr Lys His Leu Asp Ser Ser  
 245 250 255  
 Ser Asn Glu Arg Pro Asp Ile Ser Ser Ile Gln Arg Arg Ile Lys Lys  
 260 265 270  
 Val Thr His Asp Met Asp Met Cys Tyr Gly Met Met Gly Ser Leu Phe  
 275 280 285  
 Arg Ser Gly Ser Arg Gln Thr Leu Phe Ala Ser Gln Val Met Arg Tyr  
 290 295 300  
 Ala Asp Leu Tyr Ala Ala Ser Phe Ile Asn Leu Leu Tyr Tyr Pro Phe  
 305 310 315 320  
 Ser Tyr Leu Phe Arg Ala Ala His Val Leu Met Pro His Glu Ser Thr  
 325 330 335  
 Val Glu His Thr His Val Asp Ile Asn Glu Met Glu Ser Pro Leu Ala  
 340 345 350  
 Thr Arg Asn Arg Thr Ser Val Asp Phe Lys Asp Thr Asp Tyr Lys Arg  
 355 360 365  
 His Gln Leu Thr Arg Ser Ile Ser Glu Ile Lys Pro Pro Asn Leu Phe  
 370 375 380  
 Pro Leu Ala Pro Gln Glu Ile Thr His Cys His Asp Glu Asp Asp Asp

385                      390                      395                      400  
 Glu Glu Glu Glu Glu Glu Glu Glu  
 405

<210> 2942

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2942

Met Leu Pro Asp Phe Ile Leu Phe Phe Val Val Ser Glu Thr Val Leu  
 1                      5                      10                      15  
 Leu Cys His Thr Gly Trp Asn Ala Val Ala Gln Ser Trp Leu Ser Ala  
 20                      25                      30  
 Thr Ser Ile Ser Gln Val Gln Ala Ile Leu Leu Thr Ser Ala Ser Arg  
 35                      40                      45  
 Val Ala Gly Ile Thr Gly Ile Cys His His Asp Arg Leu Ile Phe Phe  
 50                      55                      60  
 Val Phe Leu Val Glu Thr Arg Phe His His Val Gly Gln Ala Gly Leu  
 65                      70                      75                      80  
 Glu Leu Leu Thr Ser Ser Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala  
 85                      90                      95  
 Gly Ile Thr Gly Leu Ser Gln His Val Gln Pro Asp Phe Ile Phe Glu  
 100                      105                      110  
 Ile Phe Leu  
 115

&lt;210&gt; 2943

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

Met Glu Pro His Ala Gly Arg Trp Gly Leu Gly Asp Leu Gln Pro Trp

1 5 10 15

Ala Pro Leu Thr Pro Ser Pro Ala Arg Met Gln Ala Leu Leu Asn Leu

20 25 30

Ala Glu Arg Leu Gly Asp Ala Lys Pro Arg Gly Leu Thr Lys Ala Asp

35 40 45

Ile Glu Gln Leu Pro Ser Tyr Arg Phe Asn Pro Asp Ser His Gln Ser

50 55 60

Glu Gln Thr Leu Cys Val Val Cys Phe Ser Asp Phe Glu Ala Arg Gln

65 70 75 80

Leu Leu Arg Val Leu Pro Cys Asn His Glu Phe His Thr Lys Cys Val

85 90 95

Asp Lys Trp Leu Lys Val Thr Leu Pro Arg Ser Ala Pro Gly Tyr Ser

100 105 110

Ser Cys Ser Asp Gly Gly Met Gly Trp Pro Gly Leu Phe Pro Ser Leu

115 120 125

Ser Leu Ser Ser Ser Arg Lys Phe Trp Leu Gln Arg Thr Lys Ser Pro

130 135 140

Gln Val Ala Ala Gln Met Trp Trp Val Gly Ala Gly Glu Ser Asn Ala

145 150 155 160

&lt;210&gt; 2944



&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2944

Met Arg Gln Leu Gly Trp Gly Ile Gln Thr Asn Thr Ala Asp Asp Arg

1 5 10 15

Met Pro Glu Ser Ser Ser Ile Pro Val Met His Gly Gly Leu Gln Lys

20 25 30

Ser Pro Cys Ala Leu Trp Arg Val Cys Lys Glu Thr Gly Leu Gly Ala

35 40 45

Ala Val Gly Glu Val Ala Gly Glu Asp Arg Trp Gly Trp Asn Glu Ser

50 55 60

Gln Ser Ala Phe Arg Gly Ser Thr Ala Pro Ala Thr Val Gln Trp Gly

65 70 75 80

Leu Val Asp Arg Lys Arg Trp Cys Ser Val Pro Gly Pro Cys Cys Lys

85 90 95

Pro Ser Ile Ser Pro His Asn Pro Asn Ile Pro Ser Val Phe Pro Pro

100 105 110

Pro Gly His Leu Leu Cys Arg Phe Tyr Val Phe Leu Phe Leu Gly

115 120 125

&lt;210&gt; 2945

&lt;211&gt; 227

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2945

Met Ala Ala Asn Lys Ser Lys Gly Gln Ser Ser Leu Ala Leu His Lys  
 1 5 10 15  
 Val Ile Met Val Gly Ser Gly Gly Val Gly Lys Ser Ala Leu Thr Leu  
 20 25 30  
 Gln Phe Met Asn Val Ser Lys Ser Leu Ala Tyr Asp Lys Lys Lys Tyr  
 35 40 45  
 Thr Ala Asn Lys Lys Val Glu Gly Ile Leu Glu Phe Val Glu Asp Tyr  
 50 55 60  
 Glu Pro Thr Lys Ala Asp Ser Tyr Arg Lys Lys Val Val Leu Asp Gly  
 65 70 75 80  
 Glu Glu Val Gln Ile Asp Ile Leu Asp Thr Ala Gly Gln Glu Asp Tyr  
 85 90 95  
 Ala Ala Ile Arg Asp Asn Tyr Phe Arg Ser Gly Glu Gly Phe Leu Leu  
 100 105 110  
 Val Phe Ser Ile Thr Glu His Glu Ser Phe Thr Ala Thr Ala Glu Phe  
 115 120 125  
 Arg Glu Gln Ile Leu Arg Val Lys Ala Glu Glu Asp Lys Ile Pro Leu  
 130 135 140  
 Leu Val Val Gly Asn Lys Ser Asp Leu Glu Glu Arg Arg Gln Val Pro  
 145 150 155 160  
 Val Glu Glu Ala Arg Ser Lys Ala Glu Glu Trp Gly Val Gln Tyr Val  
 165 170 175  
 Glu Thr Ser Ala Lys Thr Arg Ala Asn Val Asp Lys Val Phe Phe Asp  
 180 185 190  
 Leu Met Arg Glu Ile Arg Thr Lys Lys Met Ser Glu Asn Lys Asp Lys  
 195 200 205  
 Asn Gly Lys Lys Ser Ser Lys Asn Lys Lys Ser Phe Lys Glu Arg Cys  
 210 215 220  
 Cys Leu Leu

225

&lt;210&gt; 2946

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2946

Met Asn Trp Tyr Tyr Gly Lys Trp Lys Ala His Phe Val Leu Arg Cys

1 5 10 15

Pro Ile Ser Phe Leu Asn Phe Phe Phe Phe Leu Phe Glu Met Glu Ser

20 25 30

His Ser Ile Thr Gln Ala Gly Val Glu Gly Cys Asp Leu Gly Ser Leu

35 40 45

Gln Pro Leu Pro Pro Gly Phe Lys Trp Phe Ser Cys Leu Ser Leu Pro

50 55 60

Ser Ser Trp Asp Tyr Arg His Val Pro Pro Cys Leu Ala Asn Phe Cys

65 70 75 80

Met Phe Ser Ser Asp Gly Ile Leu Pro Cys Trp Pro Gly Trp Ser Arg

85 90 95

Thr Pro Asp Leu Arg

100

&lt;210&gt; 2947

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2947

Met Ser Thr Glu Gly Gly Phe Gly Gly Thr Ser Ser Ser Asp Ala Gln  
 1 5 10 15  
 Gln Ser Leu Gln Ser Phe Trp Pro Arg Val Met Glu Glu Ile Arg Asn  
 20 25 30  
 Leu Thr Val Lys Asp Phe Arg Val Gln Glu Leu Pro Leu Ala Arg Ile  
 35 40 45  
 Lys Lys Ile Met Lys Leu Asp Glu Asp Val Lys Met Ile Ser Ala Glu  
 50 55 60  
 Ala Pro Val Leu Phe Ala Lys Ala Ala Gln Ile Phe Ile Thr Glu Leu  
 65 70 75 80  
 Thr Leu Arg Ala Trp Ile His Thr Glu Asp Asn Lys Arg Arg Thr Leu  
 85 90 95  
 Gln Arg Asn Asp Ile Ala Met Ala Ile Thr Lys Phe Asp Gln Phe Asp  
 100 105 110  
 Phe Leu Ile Asp Ile Val Pro Arg Asp Glu Leu Lys Pro Pro Lys Arg  
 115 120 125  
 Gln Glu Glu Val Arg Gln Ser Val Thr Pro Ala Glu Pro Val Gln Tyr  
 130 135 140  
 Tyr Phe Thr Leu Ala Gln Gln Pro Thr Ala Val Gln Val Gln Gly Gln  
 145 150 155 160  
 Gln Gln Gly Gln Gln Thr Thr Ser Ser Thr Thr Thr Ile Gln Pro Gly  
 165 170 175  
 Gln Ile Ile Ile Ala Gln Pro Gln Gln Gly Gln Thr Met Gln Val Met  
 180 185 190  
 Gln Gln Ile Ile Thr Asn Thr Gly Glu Ile Gln Gln Ile Pro Val Gln  
 195 200 205  
 Leu Asn Ala Gly Gln Leu Gln Tyr Ile Arg Leu Ala Gln Pro Val Ser

210	215	220
Gly Thr Gln Val Val Gln Gly Gln Ile Gln Thr Leu Ala Thr Asn Ala		
225	230	235
Gln Gln Ile Thr Gln Thr Glu Val Gln Gln Gly Gln Gln Gln Phe Ser		
245	250	255
Gln Phe Thr Asp Gly Gln Gln Leu Tyr Gln Ile Gln Gln Val Thr Met		
260	265	270
Pro Ala Gly Gln Asp Leu Ala Gln Pro Met Phe Ile Gln Ser Ala Asn		
275	280	285
Gln Pro Ser Asp Gly Gln Ala Pro Gln Val Thr Gly Asp		
290	295	300

&lt;210&gt; 2948

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2948

Met Lys Pro Leu Leu Asn Trp Ser Ile Leu Leu Phe Gln Ser Gln Leu
1 5 10 15
Pro Leu Leu Gln Ala Leu Asn Phe Thr Phe Gln Pro Gly Asp Ser Trp
20 25 30
Gln Phe Pro Lys Tyr Ala Lys Ser Ser Ala Phe Phe Pro Gly Pro Gly
35 40 45
Pro Gly His Leu Ala Leu Ser Val Ser Pro Phe Leu Leu Pro Ile Ser
50 55 60
Leu Pro Phe Trp Leu Met Ser Leu Ala His Ala Val Asn Ser Ser Trp
65 70 75 80

Asn Ile Ser Leu Pro Pro Val Asn Leu Leu Pro Ala His Phe Phe Ser  
                             85                            90                            95  
 Pro Phe Lys Asn Pro Leu Leu Lys Arg Lys Trp Gln Leu Cys Glu Val  
                             100                            105                            110  
 Ile Glu Met Leu Ile Arg Leu Ile Ile Val Ala Ser Thr Met Tyr Ile  
                             115                            120                            125

<210> 2949

<211> 473

<212> PRT

<213> Homo sapiens

<400> 2949

Met Ser Ser Pro Glu Pro Pro Thr Glu Pro Pro Glu Pro Asp Asn Pro  
     1                            5                            10                            15  
 Thr Trp Ser Thr Gln Pro Thr Tyr Ser Asn Leu Gly Gln Ile Arg Ala  
                             20                            25                            30  
 His Leu Leu Pro Ser Lys Ala Cys Arg Leu Arg Thr Pro Gly Ser Leu  
                             35                            40                            45  
 Ser Thr Asn Pro Glu Pro Leu Pro Pro Pro Leu Pro Lys Lys Ile Leu  
                             50                            55                            60  
 Thr Arg Thr Gln Ser Leu Pro Thr Arg Arg Thr Leu His Pro Ser Ser  
     65                            70                            75                            80  
 Ile Gln Val Gln Pro Pro Arg Arg Pro Phe Leu Gly Ser His Ser Val  
                             85                            90                            95  
 Asp Lys Ser Gln Ala Ala Val Gly Pro Ala Cys Leu Pro Ala Glu Leu  
                             100                            105                            110  
 Thr Phe Gly Pro Ala Asp Ala Pro Leu Gly Leu Ser Leu Arg Asp Leu

115 120 125  
His Ser Pro Glu Ala Val His Thr Ala Leu Ala Ala Arg Gln Leu Gln  
130 135 140  
Gly Leu Arg Thr Ile Tyr Ala Arg Leu Arg Ala Arg Leu Met Gly Gly  
145 150 155 160  
His Pro Gly Pro Cys His Pro Gly His Ser Phe Arg Leu Leu Asp Ser  
165 170 175  
Ser Pro Cys Ala Glu Ser Gly Asp Ala Leu Tyr Tyr Arg Val Val Arg  
180 185 190  
Ala His Glu Asp Ala Trp His Ile Leu Val Ala Lys Val Pro Lys Pro  
195 200 205  
Gly Ala Asp Val Pro His Pro Trp Gly Leu Glu Leu Gln Ala Ser Leu  
210 215 220  
Ser Pro His Phe Asn Leu Gln Gly Leu Cys Gly Leu Val Pro Glu Gly  
225 230 235 240  
Thr Leu Pro Gly Ala Pro Trp Arg Gly Ala Val Ala Leu Ala Ala Glu  
245 250 255  
Val Pro Glu Arg Thr Val Ala Gln Trp Leu Ala Glu Ala Cys Thr Gln  
260 265 270  
Pro Pro Glu Glu Phe Val Trp Ala Val Ala Leu Leu Leu Leu Gln Leu  
275 280 285  
Ser Ala Ala Leu Lys Phe Leu Glu Ala Trp Gly Ala Ala Leu Val Glu  
290 295 300  
Leu Arg Pro Glu Asn Leu Leu Leu Val Ala Pro Arg Gly Cys Ala Thr  
305 310 315 320  
Thr Gly Pro Pro Arg Leu Leu Leu Thr Asp Phe Gly Arg Val Cys Leu  
325 330 335  
Gln Pro Pro Gly Pro Pro Gly Ser Pro Gly Pro His Ala Pro Gln Leu  
340 345 350

Gly Ser Leu Leu Arg Ala Leu Leu Ser Leu Ala Ala Pro Ser Thr Thr  
 355 360 365  
 Pro Leu Ala Ala Gly Leu Glu Leu Leu Ala Ala Gln Leu Thr Arg Leu  
 370 375 380  
 Arg Pro Ser Ala Ser Arg Thr Arg Gly Ala Leu Gln Ala Leu Leu Trp  
 385 390 395 400  
 Gly Pro Gly Pro Glu Leu Arg Gly Arg Gly Ala Pro Leu Gly Pro Trp  
 405 410 415  
 Leu Arg Ala Leu Gly Pro Trp Leu Arg Val Arg Arg Gly Leu Leu Val  
 420 425 430  
 Leu Arg Leu Ala Glu Arg Ala Ala Gly Gly Glu Ala Pro Ser Leu Glu  
 435 440 445  
 Asp Trp Leu Cys Cys Glu Tyr Leu Ala Glu Ala Thr Glu Ser Ser Met  
 450 455 460  
 Gly Gln Ala Leu Ala Leu Leu Trp Asp  
 465 470

&lt;210&gt; 2950

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2950

Met Ser Ile Leu Gly Ile Pro Arg Val Cys Asp Ser Pro Val Leu Val  
 1 5 10 15  
 Asp Lys Val Arg Gln Leu Pro Leu Pro Phe Arg Leu Phe Pro Ser Ser  
 20 25 30  
 Ser Ser Val Thr Ser Leu Cys Pro Tyr His Thr Pro Cys Ser Tyr Gln



35                      40                      45  
 Phe Cys Trp Thr Arg Pro His Pro Ser Gly Thr Pro Tyr Leu Leu Gly  
 50                      55                      60  
 Val Thr Asp Thr Pro Ile Ala Ala Val Leu Trp Gly Cys Trp Ser Leu  
 65                      70                      75                      80  
 His Cys Leu Ile Glu Pro Trp Gly Phe Ala Leu Gln Ile His Leu Asn  
 85                      90                      95  
 Tyr Lys Tyr Gln Ser Ser Pro Glu Ser Val Leu Ala Val Glu Arg Asn  
 100                      105                      110  
 Cys Leu Trp Val Ser Leu Leu Cys Leu Phe Ser Phe Phe Pro  
 115                      120                      125

&lt;210&gt; 2951

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2951

Met Pro Ile Thr Cys Leu Leu Lys Glu Asn Asn Thr Met Met Leu Ser  
 1                      5                      10                      15  
 Asn Gln Leu Asn Leu Val Leu Phe Val Ser Leu Leu Leu Tyr Arg Ile  
 20                      25                      30  
 Leu Gly Lys Val Phe His Phe Leu Phe Phe Leu Phe Phe Phe Leu  
 35                      40                      45  
 Arg Trp Gly Leu Thr Leu Leu Pro Arg Arg Leu Glu Cys Ser Gly Val  
 50                      55                      60  
 Ile Ser Ala His Tyr Ser Leu Asn Leu Leu Ser Leu Arg Gln Pro Ser  
 65                      70                      75                      80

His Leu Ser His Pro Asn Ile Arg Tyr Lys Val Gly Ala Lys Val Ile

85

90

95

Ala Val Phe Ala Ile Thr Phe Asn Ser Trp Asp Tyr

100

105

&lt;210&gt; 2952

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2952

Met Pro Ala Pro Pro Ala His Thr Pro Arg Thr Leu Ala Gly Pro Val

1

5

10

15

Trp Met Ile Pro Trp Ala Pro Arg Ala Gly Ile Cys Arg Leu Arg Lys

20

25

30

Gly Leu Pro Ser Gly Gln Pro Leu Cys Ser Gln Gln Ala Leu Gln Pro

35

40

45

Cys Met Ala Pro Thr Arg Ala Ser Pro Pro Gly Thr Cys Thr Leu Gln

50

55

60

Pro Arg Pro Trp Gly Val Pro Gly Cys Asp Cys Asp Arg Met Gly Arg

65

70

75

80

Ala Trp Ser Gln Leu Leu Trp Pro Leu Gly Thr Gln Gly Ala Gly Cys

85

90

95

Arg Ile Ala Pro Val Ala Gln Gln Val Gly Ala Ser Trp Gly Ala Arg

100

105

110

Ala Lys His

115

&lt;210&gt; 2953

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2953

Met Gly Ala Ile Arg Val Ala Asn Cys Asn Leu His Asn Gln Ser Val

1 5 10 15

Gly Glu Gly Ile Ser Ala Ala Ile Gln Asp Phe Gln Val Arg Gln Tyr

20 25 30

Ile Glu Gln Leu Asn Asn Cys Arg Ile Gly Leu Gln Pro Ala Val Leu

35 40 45

Arg Arg Ala Tyr Trp Leu Glu Ala Gly Ser Ala Asn Leu Gly Leu Ile

50 55 60

Thr Val Asp Ile Ala Leu Ala Ala Asp His His Ser Lys His Glu Ala

65 70 75 80

Gln Arg His Phe Leu Glu Thr His Asp Ala Arg Thr Lys Arg Leu Trp

85 90 95

Phe Leu Trp Pro Asp Asp Ile Leu Lys Asn Lys Arg Cys Arg Asn Lys

100 105 110

Cys Gly Cys Leu Gly Gly Cys Arg Phe Phe Gly Gly Thr Val Thr Gly

115 120 125

Leu Asp Phe Phe Lys Leu Glu Glu Leu Thr Pro Ser Ser Ser Ala

130 135 140

Phe Ser Ser Thr Ser Ala Glu Ser Asp Met Tyr Tyr Gly Gln Ser Leu

145 150 155 160

Leu Gln Pro Gly Glu Trp Ile Ile Thr Lys Glu Ile Pro Lys Ile Ile

165 170 175

Asp Gly Asn Val Asn Gly Met Lys Arg Lys Glu Trp Glu Asn Lys Ser  
 180 185 190  
 Val Gly Ile Glu Val Glu Arg Lys Thr Gln His Leu Ser Leu Gln Val  
 195 200 205  
 Pro Leu Arg Ser His Ser Ser Ser Ser Ser Ser Glu Glu Asn Ser Ser  
 210 215 220  
 Ser Ser Ala Ala Gln Pro Leu Leu Ala Gly Glu Lys Glu Ser Pro Ser  
 225 230 235 240  
 Ser Val Ala Asp Asp His Leu Val Gln Lys Glu Phe Leu His Gly Thr  
 245 250 255  
 Lys Arg Asp Asp Gly Gln Ala Ser Ile Pro Thr Glu Ile Ser Gly Asn  
 260 265 270  
 Ser Pro Val Ser Pro Asn Thr Gln Asp Lys Ser Val Gly Gln Ser Pro  
 275 280 285  
 Leu Arg Ser Pro Leu Lys Arg Gln Ala Ser Val Cys Ser Thr Arg Leu  
 290 295 300  
 Gly Ser Thr Lys Ser Leu Thr Ala Ala Phe Tyr Gly Asp Lys Gln Pro  
 305 310 315 320  
 Val Thr Val Gly Val Gln Phe Ser Ser Asp Val Ser Arg Ser Asp Glu  
 325 330 335  
 Asn Val Leu Asp Ser Pro Lys Gln Arg Arg Ser Phe Gly Ser Phe Pro  
 340 345 350  
 Tyr Thr Pro Ser Ala Asp Ser Asn Ser Phe His Gln Tyr Arg Ser Met  
 355 360 365  
 Asp Ser Ser Met Ser Met Ala Asp Ser Glu Ala Tyr Phe Ser Ala Ala  
 370 375 380  
 Glu Glu Phe Glu Pro Ile Ser Ser Asp Glu Gly Pro Gly Thr Tyr Pro  
 385 390 395 400  
 Gly

&lt;210&gt; 2954

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2954

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Met Thr Gly Leu Asn Phe Gln Leu Cys Ser Cys Leu Ser Ile Ile Val
  1             5             10             15
Phe Val Ile Pro Leu Phe Pro Pro Ser Cys Leu Pro Arg Glu Leu Ile
             20             25             30
Phe Leu Lys Asn Phe Phe Thr Asn His Leu Tyr Tyr Glu Ala Gln Val
             35             40             45
Cys His Glu Val Leu Ala Ser Pro Thr Cys Val Ser Cys Arg His Ser
             50             55             60
Val Gln Asp Ile Asp Leu Gly Ala Lys Glu Gly Lys Leu Asp Ile Ile
             65             70             75             80
Leu Phe Leu Arg Leu Lys Ala Tyr Ser Leu Val Gly Glu Ser Thr Leu
             85             90             95
Leu Ser Leu Pro Gln Cys Phe Ser Pro Ser Val Leu Pro
             100             105

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&lt;210&gt; 2955

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2955

Met Trp Leu Trp Gln Asp Ile Gln Cys Cys Pro Ala Pro Pro Ser Val

1 5 10 15

Pro Pro Arg Ala Leu Glu Pro Gly Arg Ala Pro Pro Pro Pro Gly Glu

20 25 30

Gly Leu Gly Ala Gly Ile Pro Ser Leu Ser Pro Pro Gln Lys Lys Pro

35 40 45

Gln Ser Val Gly Ile Cys Val Arg Gln Lys Gly Arg Gln Lys Ala Gly

50 55 60

Leu Glu Lys Gly Asn Arg Arg Lys Glu Leu Arg Gln Ala Asn Cys Pro

65 70 75 80

Ser Leu Arg Pro Gln Arg Lys Gly Ala Asp Thr Arg Arg Leu Pro Arg

85 90 95

Glu Thr Arg Pro Thr Lys Lys Arg Thr Ala Ala Ala Gln Pro Phe Leu

100 105 110

Gln Leu Trp Asn Pro Ala Pro His Thr Ser Asn Gly Arg Thr Gly Asp

115 120 125

Leu

&lt;210&gt; 2956

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2956

Met Ser Glu Glu Glu Ala Ala Gln Ile Pro Arg Ser Ser Val Trp Glu

1	5	10	15
Gln Asp Gln Gln Asn Val Val Gln Arg Val Val Ala Leu Pro Leu Val			
20	25	30	
Arg Ala Thr Cys Thr Ala Val Cys Asp Val Tyr Ser Ala Ala Lys Asp			
35	40	45	
Arg His Pro Leu Leu Gly Ser Ala Cys Arg Leu Ala Glu Asn Cys Val			
50	55	60	
Cys Gly Leu Thr Thr Arg Ala Leu Asp His Ala Gln Pro Leu Leu Glu			
65	70	75	80
His Leu Gln Pro Gln Leu Ala Thr Met Asn Ser Leu Ala Cys Arg Gly			
85	90	95	
Leu Asp Lys Leu Glu Glu Lys Leu Pro Phe Leu Gln Gln Pro Ser Glu			
100	105	110	
Thr Val Pro Arg Thr Thr Arg His Gly Asp Leu Gln Trp Gly Gln Ala			
115	120	125	
Arg Leu Glu Ala Gly Gly Arg Glu Gly Trp			
130	135		

&lt;210&gt; 2957

&lt;211&gt; 325

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2957

Met Ser Asp Leu Pro Gly Val Ala Ala Ser Arg Arg Ala Ala Ser Glu			
1	5	10	15
Thr Arg Ile Phe Ala Ala Trp Pro Pro Pro Asp Thr Arg Arg Gln Lys			
20	25	30	

Leu Gly Ser Ser Trp Arg Gly Arg Leu Pro Ser Arg Gly Val Arg Asn  
 35 40 45  
 Ser Asp Leu Arg Gly Val Ala Thr Ser Arg His Ala Ala Ser Glu Thr  
 50 55 60  
 Arg Leu Phe Ala Ala Trp Pro Pro Pro Val Thr Arg Arg Gln Lys Leu  
 65 70 75 80  
 Ala Ser Ser Arg Arg Gly Arg Leu Pro Ser Arg Gly Val Arg Asn Ser  
 85 90 95  
 His Leu Pro Gly Val Ala Ala Ser Arg His Ala Ala Ser Glu Thr Arg  
 100 105 110  
 Ile Phe Leu Val Trp Pro Pro Pro Val Thr Arg Arg Gln Lys Leu Gly  
 115 120 125  
 Ser Ser Arg Arg Gly Arg Val Pro Ser Arg Gly Val Arg Asn Ser His  
 130 135 140  
 Leu Pro Gly Val Ala Ala Ser Arg His Ala Ala Ser Glu Thr Arg Ile  
 145 150 155 160  
 Phe Pro Ala Trp Pro Arg Pro Val Thr Gln Arg Gln Lys Leu Asp Ile  
 165 170 175  
 Pro Gly Val Ala Ala Ser Arg His Ala Ala Ser Glu Thr Arg Ser Ser  
 180 185 190  
 Trp Arg Gly Arg Leu Pro Ser Arg Ser Val Arg Asn Ser Ile Phe Leu  
 195 200 205  
 Ala Trp Pro Pro Pro Val Thr Gln Arg Gln Lys Leu Gly Leu Pro Ala  
 210 215 220  
 Met Ala Thr Ser His Pro Ala Ala Ser Glu Thr Arg Thr Phe Leu Ala  
 225 230 235 240  
 Trp Pro Arg Pro Leu Thr Gln Arg Gln Lys Leu Asp Leu Pro Gly Val  
 245 250 255  
 Ala Thr Ser Pro Pro Ala Ala Ser Glu Thr Arg Ile Val Leu Gly Trp



260                      265                      270  
 Leu Leu Leu Leu Arg Asn Val Arg Asn Ser Pro Ala Trp Ala Pro Gly  
                     275                      280                      285  
 Ser Glu Glu Ser Gly Leu Trp Trp Gln Gly Gln Ala Leu Ala His Cys  
                     290                      295                      300  
 Asp Phe Leu Cys Glu Ser Leu Thr Cys Ile Leu Gly His Lys Pro Cys  
 305                      310                      315                      320  
 Arg Leu Phe Trp Glu  
                     325

<210> 2958

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2958

Met Thr Lys Asp Ala Thr Lys Glu Ala Leu His Ala Thr Met Asp Leu  
                     1                      5                      10                      15  
 Thr Lys Glu Ala Val Ser Leu Thr Lys Asp Ala Phe Ser Leu Gly Arg  
                     20                      25                      30  
 Asp Arg Met Thr Ser Thr Met His Lys Met Leu Ser Leu Pro Pro Ala  
                     35                      40                      45  
 Lys Glu Pro Met Ala Lys Thr Asp Glu Gly Val Ala Ala Pro Val Ser  
                     50                      55                      60  
 Gly Gly Ala Ala Arg Leu Arg Phe Phe Ser Met Lys Arg Thr Val Ser  
                     65                      70                      75                      80  
 Gln Gln Ser Phe Asp Gly Val Ser Leu Asp Ser Ser Gly Pro Glu Asp  
                     85                      90                      95

Arg Ile Ser Val Asp Ser Asp Gly Ser Asp Ser Phe Val Met Leu Leu  
100 105 110  
Glu Ser Glu Ser Gly Pro Glu Ser Val Pro Pro Gly Ser Leu Ser Asn  
115 120 125  
Val Ser Asp Asn Ala Gly Val Gln Gly Ser Pro Leu Val Asn Asn Tyr  
130 135 140  
Gly Gln Gly Ser Pro Ala Ala Asn Ser Ser Val Ser Pro Ser Gly Glu  
145 150 155 160  
Asp Leu Ile Phe His Pro Val Ser Val Leu Val Leu Lys Val Asn Glu  
165 170 175  
Val Ser Phe Gly Ile Glu Val Arg Gly Glu Asp Leu Thr Val Ala Leu  
180 185 190  
Gln Ala Glu Glu Leu Thr Leu Gln Gln Leu Gly Thr Val Gly Leu Trp  
195 200 205  
Gln Phe Leu His Gly Gln Cys Pro Gly Thr Cys Phe Gln Glu Ser Ser  
210 215 220  
Thr Leu Lys Thr Gly His Ile Arg Pro Ala Val Gly Leu Arg Phe Glu  
225 230 235 240  
Val Gly Pro Gly Ala Ala Val His Ser Pro Leu Ala Ser Gln Asn Gly  
245 250 255  
Phe Leu His Leu Leu Leu His Gly Cys Asp Leu Glu Leu Leu Thr Ser  
260 265 270  
Val Leu Ser Gly Leu Gly Pro Phe Leu Glu Asp Glu Glu Ile Pro Val  
275 280 285  
Val Val Pro Met Gln Ile Glu Leu Leu Asn Ser Ser Ile Thr Leu Lys  
290 295 300  
Asp Asp Ile Pro Pro Ile Tyr Pro Thr Ser Pro Gly Pro Ile Pro Ile  
305 310 315 320  
Thr Leu Ala Met Glu His Val Val Leu Lys Arg Ser Asp Asp Gly Val

	325		330		335
Phe His Ile Gly	Ala Ala Ala Gln Asp	Lys Pro Ser Ala	Glu Val Leu		
	340		345		350
Lys Ser Glu Lys	Arg Gln Pro Pro	Lys Glu Gln Val	Phe Leu Val	Pro	
	355		360		365
Thr Gly Glu Val	Phe Glu Gln Gln	Val Lys Glu Leu	Pro Ile Leu	Gln	
	370		375		380
Lys Glu Leu Ile	Glu Thr Lys Gln	Ala Leu Ala Asn	Ala Asn His	Asp	
385		390		395	400
Lys Glu Lys Leu	Leu Gln Glu Ile	Arg Lys Tyr Asn	Pro Phe Phe	Glu	
	405		410		415
Leu					

&lt;210&gt; 2959

&lt;211&gt; 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2959

Met Gln Gln Leu	Arg Val Thr Ser	Thr Ser Gly Ala	Gly Cys Pro Gly
1	5	10	15
Leu Gly Leu Pro	Glu Lys Gly Arg	Thr His Pro Pro	Arg Thr Gln Arg
	20	25	30
Gly Arg Gly Pro	Asp Thr Cys Pro	Ser Pro Asn Arg	Val Ile Val Lys
	35	40	45
Arg Ser Gly Phe	Glu Pro Gln Asn	Leu Ile Leu Ser	Leu Phe Cys Pro
	50	55	60

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2960

Met	Ile	Thr	Val	Val	Tyr	Gly	Pro	Asp	Leu	Val	Asn	Ile	Ser	His	Leu
1				5					10					15	
Asn	Leu	Val	Ala	Phe	Gln	Glu	Glu	Val	Ala	Lys	Glu	Trp	Thr	Asn	Glu
		20						25					30		
Val	Phe	Ser	Leu	Ala	Thr	Asn	Leu	Leu	Ala	Gln	Asn	Met	Ser	Arg	Asp
		35					40					45			
Ala	Phe	Leu	Glu	Lys	Ala	Tyr	Thr	Lys	Leu	Lys	Leu	Gln	Val	Thr	Pro
		50				55					60				
Glu	Gly	Arg	Ile	Pro	Leu	Lys	Asn	Ile	Tyr	Arg	Leu	Phe	Ser	Ala	Asp
65				70					75					80	
Arg	Lys	Arg	Val	Gly	Thr	Ala	Leu	Glu	Ala	Cys	Ser	Leu	Pro	Ser	Ser
			85					90						95	
Arg	Asn	Asp	Ser	Ile	Pro	Gln	Glu	Asp	Phe	Thr	Pro	Glu	Val	Tyr	Arg
		100						105					110		
Val	Phe	Leu	Asn	Asn	Leu	Cys	Pro	Arg	Pro	Glu	Ile	Asp	Asn	Ile	Phe
		115						120					125		
Ser	Glu	Phe	Gly	Ala	Lys	Ser	Lys	Pro	Tyr	Leu	Thr	Val	Asp	Gln	Met
		130					135					140			
Met	Asp	Phe	Ile	Asn	Leu	Lys	Gln	Arg	Asp	Pro	Arg	Leu	Asn	Glu	Ile
145					150					155				160	
Leu	Tyr	Pro	Pro	Leu	Lys	Gln	Glu	Gln	Val	Gln	Val	Leu	Ile	Glu	Lys
				165					170					175	
Tyr	Glu	Pro	Asn	Asn	Ser	Leu	Ala	Arg	Lys	Gly	Gln	Ile	Ser	Val	Asp
			180						185					190	
Gly	Phe	Met	Arg	Tyr	Leu	Ser	Gly	Glu	Glu	Asn	Gly	Val	Val	Ser	Pro
		195						200						205	

Glu Lys Leu Asp Leu Asn Glu Asp Met Ser Gln Pro Leu Ser His Tyr  
 210 215 220  
 Phe Ile Asn Ser Ser His Asn Thr Tyr Leu Thr Ala Gly Gln Leu Ala  
 225 230 235 240  
 Gly Asn Ser Ser Val Glu Met Tyr Arg Gln Val Leu Leu Ser Gly Cys  
 245 250 255  
 Arg Cys Val Glu Leu Asp Cys Trp Lys Gly Arg Thr Ala Glu Glu Glu  
 260 265 270  
 Pro Val Ile Thr His Gly Phe Thr Met Thr Thr Glu Ile Ser Phe Lys  
 275 280 285  
 Glu Val Ile Glu Ala Ile Ala Glu Cys Ala Phe Lys Thr Ser Pro Phe  
 290 295 300  
 Pro Ile Leu Leu Ser Phe Glu Asn His Val Asp Ser Pro Lys Gln Gln  
 305 310 315 320  
 Ala Lys Met Ala Glu Tyr Cys Arg Leu Ile Phe Gly Asp Ala Leu Leu  
 325 330 335  
 Met Glu Pro Leu Glu Lys Tyr Pro Leu Glu Ser Gly Val Pro Leu Pro  
 340 345 350  
 Ser Pro Met Asp Leu Met Tyr Lys Ile Leu Val Lys Asn Lys Lys Lys  
 355 360 365  
 Ser His Lys Ser Ser Glu Gly Ser Gly Lys Lys Lys Leu Ser Glu Gln  
 370 375 380  
 Ala Ser Asn Thr Tyr Ser Asp Ser Ser Ser Met Phe Glu Pro Ser Ser  
 385 390 395 400  
 Pro Gly Ala Gly Glu Ala Asp Thr Glu Ser Asp Asp Asp Asp Asp  
 405 410 415  
 Asp Asp Cys Lys Lys Ser Ser Met Asp Glu Gly Thr Ala Gly Ser Glu  
 420 425 430  
 Ala Met Ala Thr Glu Glu Met Ser Asn Leu Val Asn Tyr Ile Gln Pro

435	440	445
Val Lys Phe Glu Ser Phe Glu Ile Ser Lys Lys Arg Asn Lys Ser Phe		
450	455	460
Glu Met Ser Ser Phe Val Glu Thr Lys Gly Leu Glu Gln Leu Thr Lys		
465	470	475
Ser Pro Val Glu Phe Val Glu Tyr Asn Lys Met Gln Leu Ser Arg Ile		
485	490	495
Tyr Pro Lys Gly Thr Arg Val Asp Ser Ser Asn Tyr Met Pro Gln Leu		
500	505	510
Phe Trp Asn Ala Gly Cys Gln Met Val Ala Leu Asn Phe Gln Thr Met		
515	520	525
Asp Leu Ala Met Gln Ile Asn Met Gly Met Tyr Glu Tyr Asn Gly Lys		
530	535	540
Ser Gly Tyr Arg Leu Lys Pro Glu Phe Met Arg Arg Pro Asp Lys His		
545	550	555
Phe Asp Pro Phe Thr Glu Gly Ile Val Asp Gly Ile Val Ala Asn Thr		
565	570	575
Leu Ser Val Lys Ile Ile Ser Gly Gln Phe Leu Ser Asp Lys Lys Val		
580	585	590
Gly Thr Tyr Val Glu Val Asp Met Phe Gly Leu Pro Val Asp Thr Arg		
595	600	605
Arg Lys Ala Phe Lys Thr Lys Thr Ser Gln Gly Asn Ala Val Asn Pro		
610	615	620
Val Trp Glu Glu Glu Pro Ile Val Phe Lys Lys Val Val Leu Pro Thr		
625	630	635
Leu Ala Cys Leu Arg Ile Ala Val Tyr Glu Glu Gly Gly Lys Phe Ile		
645	650	655
Gly His Arg Ile Leu Pro Val Gln Ala Ile Arg Pro Gly Tyr His Tyr		
660	665	670

Ile Cys Leu Arg Asn Glu Arg Asn Gln Pro Leu Thr Leu Pro Ala Val  
675 680 685  
Phe Val Tyr Ile Glu Val Lys Asp Tyr Val Pro Asp Thr Tyr Ala Asp  
690 695 700  
Val Ile Glu Ala Leu Ser Asn Pro Ile Arg Tyr Val Asn Leu Met Glu  
705 710 715 720  
Gln Arg Ala Lys Gln Leu Ala Ala Leu Thr Leu Glu Asp Glu Glu Glu  
725 730 735  
Val Lys Lys Glu Ala Asp Pro Gly Glu Thr Pro Ser Glu Ala Pro Ser  
740 745 750  
Glu Ala Arg Thr Thr Pro Ala Glu Asn Gly Val Asn His Thr Thr Thr  
755 760 765  
Leu Thr Pro Lys Pro Pro Ser Gln Ala Leu His Ser Gln Pro Ala Pro  
770 775 780  
Gly Ser Val Lys Ala Pro Ala Lys Thr Glu Asp Leu Ile Gln Ser Val  
785 790 795 800  
Leu Thr Glu Val Glu Ala Gln Thr Ile Glu Glu Leu Lys Gln Gln Lys  
805 810 815  
Ser Phe Val Lys Leu Gln Lys Lys His Tyr Lys Glu Met Lys Asp Leu  
820 825 830  
Val Lys Arg His His Lys Lys Thr Thr Asp Leu Ile Lys Glu His Thr  
835 840 845  
Thr Lys Tyr Asn Glu Ile Gln Asn Asp Tyr Leu Arg Arg Arg Ala Ala  
850 855 860  
Leu Glu Lys Ser Ala Lys Lys Asp Ser Lys Lys Lys Ser Glu Pro Ser  
865 870 875 880  
Ser Pro Asp His Gly Ser Ser Thr Ile Glu Gln Asp Leu Ala Ala Leu  
885 890 895  
Asp Ala Glu Met Thr Gln Lys Leu Ile Asp Leu Lys Asp Lys Gln Gln



900 905 910  
 Gln Gln Leu Leu Asn Leu Arg Gln Glu Gln Tyr Tyr Ser Glu Lys Tyr  
 915 920 925  
 Gln Lys Arg Glu His Ile Lys Leu Leu Ile Gln Lys Leu Thr Asp Val  
 930 935 940  
 Ala Glu Glu Cys Gln Asn Asn Gln Leu Lys Lys Leu Lys Glu Ile Cys  
 945 950 955 960  
 Glu

<210> 2961

<211> 270

<212> PRT

<213> Homo sapiens

<400> 2961

Met Pro Arg Asp Asn Met Ala Ser Leu Ile Gln Arg Ile Ala Arg Gln  
 1 5 10 15  
 Ala Cys Leu Thr Phe Arg Gly Ser Trp Gly Gly Arg Gly Ala Ser Asp  
 20 25 30  
 Arg Asp Ala Ala Ser Gly Ala Glu Ala Pro Met Gln Pro Gly Phe Pro  
 35 40 45  
 Glu Asn Leu Ser Lys Leu Lys Ser Leu Leu Thr Gln Leu Arg Ala Glu  
 50 55 60  
 Asp Leu Asn Ile Ala Pro Arg Lys Ala Thr Leu Gln Pro Leu Pro Pro  
 65 70 75 80  
 Asn Leu Pro Pro Val Thr Tyr Met His Ile Tyr Glu Thr Asp Gly Phe  
 85 90 95

Ser Leu Gly Val Phe Leu Leu Lys Ser Gly Thr Ser Ile Pro Leu His  
100 105 110  
Asp His Pro Gly Met His Gly Met Leu Lys Val Leu Tyr Gly Thr Val  
115 120 125  
Arg Ile Ser Cys Met Asp Lys Leu Asp Ala Gly Gly Gly Gln Arg Pro  
130 135 140  
Arg Ala Leu Pro Pro Glu Gln Gln Phe Glu Pro Pro Leu Gln Pro Arg  
145 150 155 160  
Glu Arg Glu Ala Val Arg Pro Gly Val Leu Arg Ser Arg Ala Glu Tyr  
165 170 175  
Thr Glu Ala Ser Gly Pro Cys Ile Leu Thr Pro His Arg Asp Asn Leu  
180 185 190  
His Gln Ile Asp Ala Val Glu Gly Pro Ala Ala Phe Leu Asp Ile Leu  
195 200 205  
Ala Pro Pro Tyr Asp Pro Asp Asp Gly Arg Asp Cys His Tyr Tyr Arg  
210 215 220  
Val Leu Glu Pro Val Arg Pro Lys Glu Ala Ser Ser Ser Ala Cys Asp  
225 230 235 240  
Leu Pro Arg Glu Val Trp Leu Leu Glu Thr Pro Gln Ala Asp Asp Phe  
245 250 255  
Trp Cys Glu Gly Glu Pro Tyr Pro Gly Pro Lys Val Phe Pro  
260 265 270

&lt;210&gt; 2962

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2962

Met Lys Phe Ser Pro Ala His Tyr Leu Leu Pro Leu Leu Pro Ala Leu

1 5 10 15

Val Leu Ser Thr Arg Gln Asp Tyr Glu Glu Leu Glu Lys Gln Leu Lys

20 25 30

Glu Val Phe Lys Glu Arg Ser Thr Ile Leu Arg Gln Leu Thr Lys Thr

35 40 45

Ser Arg Glu Leu Asp Gly Ile Lys Val Asn Leu Gln Ser Leu Lys Asn

50 55 60

Asp Glu Gln Ser Ala Lys Thr Asp Val Gln Lys Leu Leu Glu Leu Gly

65 70 75 80

Gln Lys Gln Arg Glu Glu Met Lys Ser Leu Gln Glu Ala Leu Gln Asn

85 90 95

Gln Leu Lys Glu Thr Ser Glu Lys Ala Glu Lys His Gln Ala Thr Ile

100 105 110

Asn Phe Leu Lys Thr Glu Val Glu Arg Lys Ser Lys Met Ile Arg Asp

115 120 125

Leu Gln Asn Glu Val Ile Gln Ile

130 135

&lt;210&gt; 2963

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2963

Met Ile Gly Thr Leu Leu Ile Lys Ser Ser Gln Val Asn Glu Leu Val

1 5 10 15

Asp Ser Leu Phe Pro Pro Leu Cys His Asn Leu Leu Lys Gly Arg Asp  
                   20                                  25                                  30  
 Gly Val Phe Lys Lys Lys Lys Phe Trp Ser Lys Thr His Lys Ile Tyr  
                   35                                  40                                  45  
 His Leu His His Cys Cys Val Gln Phe Ser Ser Ile Asn Tyr Thr Tyr  
                   50                                  55                                  60  
 Ile Val Ile Gln Gln Lys Ile Val Ser Phe Tyr Ile Leu Arg Thr Gln  
                   65                                  70                                  75                                  80  
 His Ser Val Trp His Ile Ile Leu Val Asn Thr Gly Arg Ala His Ala  
                                   85                                  90                                  95  
 Phe Ala Lys Ala Arg Thr Glu Val Gln Cys His Pro Leu Pro Pro Phe  
                   100                                  105                                  110  
 His Thr Ser Thr Gly Ala Leu Lys Thr Thr Trp Asn Glu Ser Cys  
                   115                                  120                                  125

&lt;210&gt; 2964

&lt;211&gt; 606

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2964

Met Gly Asn Thr Cys Arg Val Cys Tyr Gln Leu Glu Ala Ile Lys Arg  
           1                                  5                                  10                                  15  
 Ser Asn Glu Met Ser Asn Val Met Gly Asn Thr Thr Trp Thr Thr Ser  
                   20                                  25                                  30  
 Gly Leu Lys Ser Gln Gly Arg Leu Ser Val Gly Ser Asn Arg Asp Arg  
                   35                                  40                                  45  
 Glu Ile Ser Met Ser Val Gly Leu Gly Arg Ser Gln Leu Asp Ser Lys

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Ile Ala Phe Trp Thr Glu Ala Gln Lys Ile Trp Glu Asp Gly Ser Ser  
 290 295 300  
 Asp His Ser Thr Tyr Ile Val Gln Thr Leu Asp Phe His Leu Gly His  
 305 310 315 320  
 Asn Thr Met Val Thr Lys Pro Cys Gly Ala Leu Glu Ser Pro Met Ala  
 325 330 335  
 Thr Ile Thr Lys Ile Thr Arg Arg Arg His Glu Asn Pro Pro His Gly  
 340 345 350  
 Val Ala Ser Val Lys Glu Trp Phe Asn Tyr Val Thr Ala Thr Arg Asn  
 355 360 365  
 Glu Glu Leu Asn Leu Leu Arg Asn Val Asp Ala Asn Asn Thr Glu Asn  
 370 375 380  
 Ser Thr Thr Val Lys Asn Ser Ser Leu Leu Ser Gly Phe Arg Gly Gly  
 385 390 395 400  
 Ser Ser Tyr Asn His Glu Thr Glu Thr Ile Phe Ala Leu Pro Arg Met  
 405 410 415  
 Gln Leu Asp Phe Lys Ser Ile His Val Gln Glu Pro Gln Glu Pro Ser  
 420 425 430  
 Leu Gln Asp Ala Ser Leu Lys Pro Lys Val Glu Cys Ser Val Val Thr  
 435 440 445  
 Glu Phe Thr Asp His Ile Cys Val Thr Met Asp Ala Glu Leu Ile Met  
 450 455 460  
 Phe Leu His Asp Leu Val Ser Ala Tyr Leu Lys Glu Lys Glu Lys Ala  
 465 470 475 480  
 Ile Phe Pro Pro Arg Ile Leu Ser Thr Arg Pro Gly Gln Lys Ser Pro  
 485 490 495  
 Ile Ile Ile His Asp Asp Asn Ser Ser Asp Lys Asp Arg Glu Asp Ser  
 500 505 510  
 Ile Thr Tyr Thr Thr Val Asp Trp Arg Asp Phe Met Cys Asn Thr Trp

515	520	525
His Leu Glu Pro Thr Leu Arg Leu Ile Ser Trp Thr Gly Arg Lys Ile		
530	535	540
Asp Pro Val Gly Val Asp Tyr Ile Leu Gln Lys Leu Gly Phe His His		
545	550	555
Ala Arg Thr Thr Ile Pro Lys Trp Leu Gln Arg Gly Val Met Asp Pro		
565	570	575
Leu Asp Lys Val Leu Ser Val Leu Ile Lys Lys Leu Gly Thr Ala Leu		
580	585	590
Gln Asp Glu Lys Glu Lys Lys Gly Lys Asp Lys Glu Glu His		
595	600	605

&lt;210&gt; 2965

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2965

Met Val Pro Trp Thr Pro Arg Pro Thr Arg Ser Leu Arg Gly Val Pro
1 5 10 15
Thr Gln Gly Phe Ser Leu His Cys Ala Ala Leu Leu Ser Pro Glu Phe
20 25 30
Pro Val Cys Gln Asn Pro Thr Trp Ser Pro Arg Pro Arg Ala Asn Ala
35 40 45
Thr Ser Ser Met Lys Pro Ala Thr Ser Phe Ala His Pro Trp Ala Leu
50 55 60
Thr Leu Phe Ser Gln Arg Thr Gly Thr Gly Thr Val Cys Pro Cys Ser
65 70 75 80

Ser Asn Ser Gly Thr Lys Arg Thr Leu Ala Glu Ala Arg Pro Arg Arg  
                                     85                                    90                                    95  
 Ala Glu Gly Cys Arg Phe Gln Val Gln Val His Phe Glu Phe His Ser  
                                     100                                    105                                    110  
 Gln Leu Pro Ser Phe Ser Gly Leu  
                                     115                                    120

<210> 2966

<211> 243

<212> PRT

<213> Homo sapiens

<400> 2966

Met Ser Gly Ser Pro Val Gln Lys Pro Thr Leu His Arg Ser Ile Ser  
     1                                    5                                    10                                    15  
 Thr Lys Val Leu Leu Ala Glu Gly Glu Asn Thr Pro Phe Ala Glu His  
                                     20                                    25                                    30  
 Cys Arg His Tyr Glu Asp Ser Tyr Arg His Leu Gln Ala Glu Met Gln  
                                     35                                    40                                    45  
 Ser Leu Lys Asp Gln Val Gln Glu Leu His Arg Asp Leu Thr Lys His  
                                     50                                    55                                    60  
 His Ser Leu Ile Lys Ala Glu Ile Met Gly Asp Val Leu His Lys Ser  
     65                                    70                                    75                                    80  
 Leu Gln Leu Asp Val Gln Ile Ala Ser Glu His Ala Ser Leu Glu Gly  
                                     85                                    90                                    95  
 Met Arg Val Val Phe Gln Glu Ile Trp Glu Glu Ala Tyr Gln Arg Val  
                                     100                                    105                                    110  
 Ala Asn Glu Gln Glu Ile Tyr Glu Ala Gln Leu His Asp Leu Leu Gln



115	120	125
Leu Arg Gln Glu Asn Ala Tyr Leu Thr Thr Ile Thr Lys Gln Ile Thr		
130	135	140
Pro Tyr Val Arg Ser Ile Ala Lys Val Lys Glu Arg Leu Glu Pro Arg		
145	150	155
Phe Gln Ala Pro Val Asp Glu Gln Ser Glu Ser Leu Gln Asn Thr His		
165	170	175
Asp Asp Ser Arg Asn Asn Ala Ala Ser Ala Arg Asn Asn Pro Gly Ser		
180	185	190
Val Pro Glu Lys Arg Glu Lys Thr Ser Glu Pro Lys Gly Asn Ser Trp		
195	200	205
Ala Pro Asn Gly Leu Ser Glu Glu Pro Leu Leu Lys Asn Met Asp His		
210	215	220
His Arg Ser Lys Gln Lys Asn Gly Gly Asp Val Pro Thr Trp Arg Glu		
225	230	235
His Pro Thr		240

&lt;210&gt; 2967

&lt;211&gt; 382

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2967

Met Cys Gln Leu Leu Glu Arg Val Pro Asp Thr Ser Ser Ser Ser Ser
1                      5                      10                      15
Asp Ser Asp Ser Asp Ser Asp Ser Ser Gly Thr Ser Leu Ser Glu Asp
20                      25                      30

Glu Ala Pro Gly Glu Ala Arg Asn Gly Arg Arg Pro Ala Arg Gly Ser  
 35 40 45  
 Ser Gly Glu Lys Glu Asn Arg Gly Gly Arg Arg Ala Val Arg Pro Gly  
 50 55 60  
 Ser Gly Gly Pro Leu Leu Ser Trp Pro Leu Gly Pro Ala Pro Pro Pro  
 65 70 75 80  
 Arg Pro Pro Gln Leu Glu Arg His Val Val Arg Pro Pro Pro Arg Ser  
 85 90 95  
 Pro Glu Pro Asp Thr Leu Pro Leu Ala Ala Gly Ser Asp His Pro Leu  
 100 105 110  
 Pro Arg Ala Ala Trp Leu Arg Val Phe Gln His Leu Gly Pro Arg Glu  
 115 120 125  
 Leu Cys Ile Cys Met Arg Val Cys Arg Thr Trp Ser Arg Trp Cys Tyr  
 130 135 140  
 Asp Lys Arg Leu Trp Pro Arg Met Asp Leu Ser Arg Arg Lys Ser Leu  
 145 150 155 160  
 Thr Pro Pro Met Leu Ser Gly Val Val Arg Arg Gln Pro Arg Ala Leu  
 165 170 175  
 Asp Leu Ser Trp Thr Gly Val Ser Lys Lys Gln Leu Met Trp Leu Leu  
 180 185 190  
 Asn Arg Leu Gln Gly Leu Gln Glu Leu Val Leu Ser Gly Cys Ser Trp  
 195 200 205  
 Leu Ser Val Ser Ala Leu Gly Ser Ala Pro Leu Pro Ala Leu Arg Leu  
 210 215 220  
 Leu Asp Leu Arg Trp Ile Glu Asp Val Lys Asp Ser Gln Leu Arg Glu  
 225 230 235 240  
 Leu Leu Leu Pro Pro Pro Asp Thr Lys Pro Gly Gln Thr Glu Ser Arg  
 245 250 255  
 Gly Arg Leu Gln Gly Val Ala Glu Leu Arg Leu Ala Gly Leu Glu Leu

260	265	270
Thr Asp Ala Ser Leu Arg Leu Leu Leu Arg His Ala Pro Gln Leu Ser		
275	280	285
Ala Leu Asp Leu Ser His Cys Ala His Val Gly Asp Pro Ser Val His		
290	295	300
Leu Leu Thr Ala Pro Thr Ser Pro Leu Arg Glu Thr Leu Val His Leu		
305	310	315
Asn Leu Ala Gly Cys His Arg Leu Thr Asp His Cys Leu Pro Leu Phe		
325	330	335
Arg Arg Cys Pro Arg Leu Arg Arg Leu Asp Leu Arg Ser Cys Arg Gln		
340	345	350
Leu Ser Pro Glu Ala Cys Ala Arg Leu Ala Ala Ala Gly Pro Pro Gly		
355	360	365
Pro Phe Arg Cys Pro Glu Glu Lys Leu Leu Leu Lys Asp Ser		
370	375	380

&lt;210&gt; 2968

&lt;211&gt; 676

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2968

Met Ala Ala Ile Gln His Gly His Glu Ala Val Val Arg Leu Leu Met
1                      5                      10                      15
Glu Trp Gly Ala Asp Pro Asn His Ala Ala Arg Thr Val Gly Trp Ser
20                      25                      30
Pro Leu Met Leu Ala Ala Leu Thr Gly Arg Leu Gly Val Ala Gln Gln
35                      40                      45

Leu Val Glu Lys Gly Ala Asn Pro Asp His Leu Ser Val Leu Glu Lys  
 50 55 60  
 Thr Ala Phe Glu Val Ala Leu Asp Cys Lys His Arg Asp Leu Val Asp  
 65 70 75 80  
 Tyr Leu Asp Pro Leu Thr Thr Val Arg Pro Lys Thr Asp Glu Glu Lys  
 85 90 95  
 Arg Arg Pro Asp Ile Phe His Ala Leu Lys Met Gly Asn Phe Gln Leu  
 100 105 110  
 Val Lys Glu Ile Ala Asp Glu Asp Pro Ser His Val Asn Leu Val Asn  
 115 120 125  
 Gly Asp Gly Ala Thr Pro Leu Met Leu Ala Ala Val Thr Gly Gln Leu  
 130 135 140  
 Ala Leu Val Gln Leu Leu Val Glu Arg His Ala Asp Val Asp Lys Gln  
 145 150 155 160  
 Asp Ser Val His Gly Trp Thr Ala Leu Met Gln Ala Thr Tyr His Gly  
 165 170 175  
 Asn Lys Glu Ile Val Lys Tyr Leu Leu Asn Gln Gly Ala Asp Val Thr  
 180 185 190  
 Leu Arg Ala Lys Asn Gly Tyr Thr Ala Phe Asp Leu Val Met Leu Leu  
 195 200 205  
 Asn Asp Pro Asp Thr Glu Leu Val Arg Leu Leu Ala Ser Val Cys Met  
 210 215 220  
 Gln Val Asn Lys Asp Lys Gly Arg Pro Ser His Gln Pro Pro Leu Pro  
 225 230 235 240  
 His Ser Lys Val Arg Gln Pro Trp Ser Ile Pro Val Leu Pro Asp Asp  
 245 250 255  
 Lys Gly Gly Leu Lys Ser Trp Trp Asn Arg Met Ser Asn Arg Phe Arg  
 260 265 270  
 Lys Leu Lys Leu Met Gln Thr Leu Pro Arg Gly Leu Ser Ser Asn Gln

275 280 285  
Pro Leu Pro Phe Ser Asp Glu Pro Glu Pro Ala Leu Asp Ser Thr Met  
290 295 300  
Arg Ala Ala Pro Gln Asp Lys Thr Ser Arg Ser Ala Leu Pro Asp Ala  
305 310 315 320  
Ala Pro Val Thr Lys Asp Asn Gly Pro Gly Ser Thr Arg Gly Glu Lys  
325 330 335  
Glu Asp Thr Leu Leu Thr Thr Met Leu Arg Asn Gly Ala Pro Leu Thr  
340 345 350  
Arg Leu Pro Ser Asp Lys Leu Lys Ala Val Ile Pro Pro Phe Leu Pro  
355 360 365  
Pro Ser Ser Phe Glu Leu Trp Ser Ser Asp Arg Ser Arg Thr Arg His  
370 375 380  
Asn Gly Lys Ala Asp Pro Met Lys Thr Ala Leu Pro Gln Arg Ala Ser  
385 390 395 400  
Arg Gly His Pro Val Gly Gly Gly Gly Thr Asp Thr Thr Pro Val Arg  
405 410 415  
Pro Val Lys Phe Pro Ser Leu Pro Arg Ser Pro Ala Ser Ser Ala Asn  
420 425 430  
Ser Gly Asn Phe Asn His Ser Pro His Ser Ser Gly Gly Ser Ser Gly  
435 440 445  
Ile Gly Val Ser Arg His Gly Gly Glu Leu Leu Asn Arg Ser Gly Gly  
450 455 460  
Ser Ile Asp Asn Val Leu Ser Gln Ile Ala Ala Gln Arg Lys Lys Ala  
465 470 475 480  
Ala Gly Leu Leu Glu Gln Lys Pro Ser His Arg Ser Ser Pro Val Gly  
485 490 495  
Pro Ala Pro Gly Ser Ser Pro Ser Glu Leu Pro Ala Ser Pro Ala Gly  
500 505 510

Gly Ser Ala Pro Val Gly Lys Lys Leu Glu Thr Ser Lys Arg Pro Pro  
515 520 525  
Ser Gly Thr Ser Thr Thr Ser Lys Ser Thr Ser Pro Thr Leu Thr Pro  
530 535 540  
Ser Pro Ser Pro Lys Gly His Thr Ala Glu Ser Ser Val Ser Ser Ser  
545 550 555 560  
Ser Ser His Arg Gln Ser Lys Ser Ser Gly Gly Ser Ser Ser Gly Thr  
565 570 575  
Ile Thr Asp Glu Asp Glu Leu Thr Gly Ile Leu Lys Lys Leu Ser Leu  
580 585 590  
Glu Lys Tyr Gln Pro Ile Phe Glu Glu Gln Glu Val Asp Met Glu Ala  
595 600 605  
Phe Leu Thr Leu Thr Asp Gly Asp Leu Lys Glu Leu Gly Ile Lys Thr  
610 615 620  
Asp Gly Ser Arg Gln Gln Ile Leu Ala Ala Ile Ser Glu Leu Asn Ala  
625 630 635 640  
Gly Lys Gly Arg Glu Arg Gln Ile Leu Gln Glu Thr Ile His Asn Phe  
645 650 655  
His Ser Ser Phe Glu Ser Ser Ala Ser Asn Thr Arg Ala Pro Gly Asn  
660 665 670  
Ser Pro Cys Ala  
675

&lt;210&gt; 2969

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2969

Met Glu Ser Cys Ser Val Ala Gln Ala Gly Val Leu Thr Ser Pro Phe  
 1 5 10 15  
 Met Trp Arg Trp Thr Gly Met Ala Gly Ala Leu Ser Ala Leu Asp Asn  
 20 25 30  
 Thr Ile Glu Asp Asp Ala Asp Asp Gln Leu Pro Cys Gly Glu Gly Arg  
 35 40 45  
 Pro Gly Trp Val Arg Gly Glu Leu Leu Gly Ser Gln Gly Val Cys Lys  
 50 55 60  
 Asp Ser Lys Asp Leu Phe Val Pro Thr Ser Ser Ser Leu Tyr Gly Cys  
 65 70 75 80  
 Phe Cys Val Gly Leu Val Ser Gly Met Ala Ile Ser Val Leu Leu Leu  
 85 90 95  
 Ala Ser Asp Phe Arg Lys Leu Asp Phe Ser Arg Pro Glu Pro Cys Phe  
 100 105 110  
 Glu Lys Glu Ala Ser Leu Trp Phe Val Ala Gln His  
 115 120

&lt;210&gt; 2970

&lt;211&gt; 1366

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2970

Met Ser Pro Cys Gly Arg Lys Met Gly Glu Gly Arg Gln Gln Gln Arg  
 1 5 10 15  
 Ala Pro Val Gly Lys Leu Leu Leu Leu Pro Gly Arg Arg Asp Thr Pro  
 20 25 30

His Gly Arg Ser Gly Ser Ser Gly Ala Arg Thr Gln Arg Ser Leu Leu  
 35 40 45  
 Trp Leu Leu Val His Val Trp Leu Trp Ala Ala Ser Gly Ser Ser Ala  
 50 55 60  
 Gln Leu Phe Asn Leu Thr Leu Ser Val Asp Glu Gly Leu Pro Pro Asp  
 65 70 75 80  
 Thr Leu Val Gly Asp Ile Arg Ala Gly Leu Pro Ala Ala Gln Gln Gln  
 85 90 95  
 Glu Gly Ser Gly Phe Phe Leu Ser Glu Asp Ser Asp Asp Ser Pro Leu  
 100 105 110  
 Leu Asp Asp Phe His Val His Pro Asp Thr Gly Ile Ile Arg Thr Ala  
 115 120 125  
 Arg Arg Leu Asp Arg Glu Arg Arg Asp His Tyr Ser Phe Val Ala Ala  
 130 135 140  
 Thr Leu Leu Gly Ala Val Val Gln Val Glu Ile Arg Val Asn Asp Val  
 145 150 155 160  
 Asn Asp His Ser Pro Arg Phe Pro Leu Asp Ser Leu Gln Leu Asp Val  
 165 170 175  
 Ser Glu Leu Ser Pro Pro Gly Thr Ala Phe Arg Leu Pro Gly Ala His  
 180 185 190  
 Asp Pro Asp Ala Gly Leu Phe Ser Thr Gln Gly Tyr Thr Leu Val Gln  
 195 200 205  
 Pro Ser Asp Leu Pro Lys Asp Pro Ala Gly Pro Phe Phe Gln Leu Arg  
 210 215 220  
 Tyr Arg Thr Pro Gly Pro Leu Pro Ser Pro Leu Leu Pro Gly Ser Ser  
 225 230 235 240  
 Ser Pro Leu Glu Pro Leu Asp Leu Val Leu Leu Arg Arg Leu Asp Arg  
 245 250 255  
 Glu Glu Ala Ala Ala His Arg Leu Gln Ile Glu Ala Trp Asp Gly Gly



260 265 270  
Arg Pro Arg Arg Thr Gly Leu Leu Ser Val Glu Leu Arg Val Leu Asp  
275 280 285  
Glu Asn Asp Asn Pro Pro Val Phe Glu Gln Asp Glu Tyr Arg Ala Ala  
290 295 300  
Val Arg Glu Asp Ala Gln Pro Gly Ala Glu Val Cys Arg Val Arg Ala  
305 310 315 320  
Thr Asp Arg Asp Leu Gly Pro Asn Gly Phe Val Arg Tyr Ser Val Arg  
325 330 335  
Ala Arg Gln Val Pro Gly Ala Gly Ser Gly Gly Gly Ala Leu Gly Asp  
340 345 350  
Ala Ala Tyr Phe Ala Val Glu Glu Leu Ser Gly Val Val Arg Val Trp  
355 360 365  
Arg Pro Leu Asp Arg Glu Ala Gln Ala Trp His Gln Leu Val Val Glu  
370 375 380  
Ala Arg Asp Gly Gly Ala Glu Pro Glu Val Ala Thr Val Arg Val Ser  
385 390 395 400  
Ile Ala Val Leu Asp Val Asn Asp Asn Arg Pro Ala Ile His Val Leu  
405 410 415  
Phe Leu Thr Glu Gly Gly Val Ala Arg Val Ser Glu Gly Ala Arg Pro  
420 425 430  
Gly Asp Tyr Val Ala Arg Val Ser Val Ser Asp Ala Asp Gly Asp Trp  
435 440 445  
Glu Lys Glu Asp Glu Ala Thr Gly Glu Leu Gly Val Gly Leu Gly Asp  
450 455 460  
Gly Ser Ile Ser Leu Ser Leu Glu Gly Gly Glu Gly Asp Phe Ala Leu  
465 470 475 480  
Leu Pro Gly Gly Pro Pro Gly Val Phe Phe Leu Cys Val Glu Gly Pro  
485 490 495

Leu Asp Arg Glu Ser Arg Asp Leu Tyr Glu Leu Leu Leu Val Ala Thr  
500 505 510  
Asp Ala Gly Ser Pro Pro Leu Ser Thr Glu Glu Thr Leu Leu Leu Arg  
515 520 525  
Val Ala Asp Leu Asn Asp Gln Pro Pro Leu Phe Ser Gln Gln His Tyr  
530 535 540  
Lys Ala Ser Val Ser Glu Ala Ala Ala Pro Gly Thr Val Val Met Trp  
545 550 555 560  
Val Ser Ala Ser Asp Ala Asp Glu Ala Gly Ser Asp His Ala Trp Leu  
565 570 575  
Arg Tyr Thr Val Val Gln Leu Ser Ala Pro Cys Asn Leu Gly Ser Leu  
580 585 590  
Glu Ser Lys Met Val His Thr Ala Glu Cys Gly Pro Ser Phe Ala Ile  
595 600 605  
Asp Ser Glu Ser Gly Val Ile Ser Thr Ile Arg Ala Leu Asp Arg Glu  
610 615 620  
Val Gln Glu Ala Val Glu Leu Lys Val Val Ala Gln Asp Leu Gly Glu  
625 630 635 640  
Pro Pro Leu Ser Ala Thr Cys Leu Val Ser Ile Thr Val Asp Asp Val  
645 650 655  
Asn Asp Asn Glu Pro Ile Phe Trp Arg Gln Val Tyr Asn Ala Thr Ile  
660 665 670  
Ala Glu His Ala Pro Val Gly His Cys Phe Leu Gln Val Thr Ala Ser  
675 680 685  
Asp Ala Asp Ser Gly Leu Tyr Gly Phe Ile Glu Tyr Ser Leu Tyr Asp  
690 695 700  
Gly Phe Leu Ser Tyr Glu Ala Pro Gln Ala Phe Arg Ile Asp Pro His  
705 710 715 720  
Asp Gly Gln Ile Cys Val Ser Gln Asp Ile Asp Arg Glu Arg Asp Pro

725	730	735
Ala Thr Tyr Asp Leu Leu Val Glu Ala Lys Asp Gly Gly Gly Leu Ser		
740	745	750
Ala Gln Ala Phe Val Arg Val Asp Leu Glu Asp Val Asn Asp Asn His		
755	760	765
Pro Val Phe Asn Pro Ser Thr Tyr Val Thr Ser Ile Ser Asp Glu Thr		
770	775	780
Gln Pro Gly Thr Glu Ile Ile Asn Val Leu Ala Thr Asp Gln Asp Ser		
785	790	795
Gly Ile Tyr Gly Thr Val Ala Tyr Glu Leu Ile Pro Gly Asn Val Ser		
805	810	815
Ser Leu Phe Thr Ile Asp Ser Thr Thr Gly Ile Ile Tyr Leu Thr Leu		
820	825	830
Pro Leu Ser His Leu Glu Ser Thr Thr Leu Leu Leu Met Val Ser Ala		
835	840	845
Gln Asp Gly Gly Gly Leu Thr Ala Val Ile Asn Ala Asp Val Thr Ile		
850	855	860
His Ile Phe Gln Thr Thr Leu Ala Pro Ala Glu Phe Glu Arg Pro Lys		
865	870	875
Tyr Thr Phe Leu Val Tyr Glu Asp Val Pro Glu Asp Ser Pro Ile Gly		
885	890	895
Thr Val Lys Ala Arg Glu Pro Leu Asn Ser Ser Glu Pro Ile Phe Tyr		
900	905	910
Arg Ile Ser Ser Gly Asp Leu Gly Gly Lys Phe Ser Ile His Pro Arg		
915	920	925
Leu Gly Thr Ile Arg Thr Arg Lys Pro Leu Asp His Glu Thr Gln Pro		
930	935	940
Val Val Val Leu Thr Val Gln Ala Gln Leu Gly Ser Ala Pro Ala Cys		
945	950	955
		960

Ser Ser Thr Glu Val Asn Ile Thr Val Met Asp Val Asn Asp Asn His  
 965 970 975  
 Pro Ala Phe Leu Arg Thr Ser Asp Glu Ile Arg Ile Ser Gln Thr Thr  
 980 985 990  
 Pro Pro Gly Thr Ala Leu Tyr Leu Ala Arg Ala Glu Asp Arg Asp Ser  
 995 1000 1005  
 Gly Arg Asn Gly Leu Ile Arg Tyr Ser Ile Ala Ser Pro Gln Pro Gly  
 1010 1015 1020  
 Val Phe Ala Ile Asp Arg Ala Leu Gly Val Leu Phe Leu Asn Gly Ser  
 1025 1030 1035 1040  
 Leu Gly Ala Gly Glu Gln Arg Glu Leu Thr Leu Thr Leu Arg Ala Glu  
 1045 1050 1055  
 Asp Gln Gly Val His Pro Gln Ala Ala Leu Leu Val Leu Thr Val Val  
 1060 1065 1070  
 Ile Glu Lys Arg Glu His Ser Pro Ser Trp Thr Phe Glu His Leu Val  
 1075 1080 1085  
 Tyr Gln Val Glu Val Ser Glu Ser Leu Ser Pro Met Thr Gln Met Leu  
 1090 1095 1100  
 Gln Thr Gln Ala His Pro Leu Gly Pro Gln Arg Ala Ala Ser Pro Leu  
 1105 1110 1115 1120  
 Arg Tyr Ser Leu Glu Pro Ser Val Asp Ser Ala Met Phe Gly Ile Arg  
 1125 1130 1135  
 Pro Tyr Thr Gly Trp Ile Tyr Leu Arg Arg Gln Phe Asp Tyr Glu Ser  
 1140 1145 1150  
 Thr Gln Thr Tyr Asn Phe Arg Val Phe Ala Trp Ile Pro Glu Asp Gly  
 1155 1160 1165  
 Phe Leu Gln Asn Val Ser Thr Thr Val Ile Val Arg Val Trp Asp Glu  
 1170 1175 1180  
 Asn Asp Asn Ser Pro Thr Phe Leu His Asp Val Leu Phe Leu Lys Val

1185                      1190                      1195                      1200  
Glu Glu Ser Pro Val Pro Gln Gly Val Ile Gly Lys Ile Thr Ala Ile  
                         1205                      1210                      1215  
Asp Met Asp Ser Gly Lys Asn Gly Gln Leu Leu Tyr Phe Leu Leu Ser  
                         1220                      1225                      1230  
Asp Gly Lys Phe Phe Lys Met Asn Pro Asn Thr Gly Glu Leu Ile Asn  
                         1235                      1240                      1245  
Trp Val Ala Leu Asp Arg Glu His Arg Gly His His Glu Met Thr Val  
                         1250                      1255                      1260  
Leu Val Thr Asp Arg Gly Ser Pro Pro Arg Asn Ala Thr Met Ala Val  
1265                      1270                      1275                      1280  
Tyr Val Ser Val Thr Asp Ile Asn Asp Asn Arg Pro Phe Phe Pro Gln  
                         1285                      1290                      1295  
Cys Leu Pro Gly Lys Glu Leu His Val Lys Val Leu Glu Gly Gln Pro  
                         1300                      1305                      1310  
Val Asn Met Leu Val Thr Thr Val Phe Ala Lys Asp Pro Asp Glu Gly  
                         1315                      1320                      1325  
Asn Asn Ala Glu Val Thr Tyr Ser Val Ser Ser Ala Arg His Met Pro  
                         1330                      1335                      1340  
Leu Lys Gly Lys Thr Ala Phe Gly Lys Gln Ser Cys Lys Lys Gln Thr  
1345                      1350                      1355                      1360  
Asn Lys Gln Thr Lys Ser  
                         1365

&lt;210&gt; 2971

&lt;211&gt; 913

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2971

Met Tyr Glu Leu Ser Ser Pro Ile Asp Gln Glu Leu Tyr Leu Phe Asp  
 1 5 10 15  
 Thr Thr Gly Lys His Leu Tyr Thr Gln Ser Leu Pro Thr Gly Asp Tyr  
 20 25 30  
 Leu Tyr Asn Phe Thr Tyr Thr Gly Asp Gly Asp Ile Thr Leu Ile Thr  
 35 40 45  
 Asp Asn Asn Gly Asn Met Val Asn Val Arg Arg Asp Ser Thr Gly Met  
 50 55 60  
 Pro Leu Trp Leu Val Val Pro Asp Gly Gln Val Tyr Trp Val Thr Met  
 65 70 75 80  
 Gly Thr Asn Ser Ala Leu Lys Ser Val Thr Thr Gln Gly His Glu Leu  
 85 90 95  
 Ala Met Met Thr Tyr His Gly Asn Ser Gly Leu Leu Ala Thr Lys Ser  
 100 105 110  
 Asn Glu Asn Gly Trp Thr Thr Phe Tyr Glu Tyr Asp Ser Phe Gly Arg  
 115 120 125  
 Leu Thr Asn Val Thr Phe Pro Thr Gly Gln Val Ser Ser Phe Arg Ser  
 130 135 140  
 Asp Thr Asp Ser Ser Val His Val Gln Val Glu Thr Ser Ser Lys Asp  
 145 150 155 160  
 Asp Val Thr Ile Thr Thr Asn Leu Ser Ala Ser Gly Ala Phe Tyr Thr  
 165 170 175  
 Leu Leu Gln Asp Gln Val Arg Asn Ser Tyr Tyr Ile Gly Ala Asp Gly  
 180 185 190  
 Ser Leu Arg Leu Leu Leu Ala Asn Gly Met Glu Val Ala Leu Gln Thr  
 195 200 205  
 Glu Pro His Leu Leu Ala Gly Thr Val Asn Pro Thr Val Gly Lys Arg

210 215 220  
Asn Val Thr Leu Pro Ile Asp Asn Gly Leu Asn Leu Val Glu Trp Arg  
225 230 235 240  
Gln Arg Lys Glu Gln Ala Arg Gly Gln Val Thr Val Phe Gly Arg Arg  
245 250 255  
Leu Arg Val His Asn Arg Asn Leu Leu Ser Leu Asp Phe Asp Arg Val  
260 265 270  
Thr Arg Thr Glu Lys Ile Tyr Asp Asp His Arg Lys Phe Thr Leu Arg  
275 280 285  
Ile Leu Tyr Asp Gln Ala Gly Arg Pro Ser Leu Trp Ser Pro Ser Ser  
290 295 300  
Arg Leu Asn Gly Val Asn Val Thr Tyr Ser Pro Gly Gly Tyr Ile Ala  
305 310 315 320  
Gly Ile Gln Arg Gly Ile Met Ser Glu Arg Met Glu Tyr Asp Gln Ala  
325 330 335  
Gly Arg Ile Thr Ser Arg Ile Phe Ala Asp Gly Lys Thr Trp Ser Tyr  
340 345 350  
Thr Tyr Leu Glu Lys Ser Met Val Leu Leu Leu His Ser Gln Arg Gln  
355 360 365  
Tyr Ile Phe Glu Phe Asp Lys Asn Asp Arg Leu Ser Ser Val Thr Met  
370 375 380  
Pro Asn Val Ala Arg Gln Thr Leu Glu Thr Ile Arg Ser Val Gly Tyr  
385 390 395 400  
Tyr Arg Asn Ile Tyr Gln Pro Pro Glu Gly Asn Ala Ser Val Ile Gln  
405 410 415  
Asp Phe Thr Glu Asp Gly His Leu Leu His Thr Phe Tyr Leu Gly Thr  
420 425 430  
Gly Arg Arg Val Ile Tyr Lys Tyr Gly Lys Leu Ser Lys Leu Ala Glu  
435 440 445

Thr Leu Tyr Asp Thr Thr Lys Val Ser Phe Thr Tyr Asp Glu Thr Ala  
450 455 460  
Gly Met Leu Lys Thr Ile Asn Leu Gln Asn Glu Gly Phe Thr Cys Thr  
465 470 475 480  
Ile Arg Tyr Arg Gln Ile Gly Pro Leu Ile Asp Arg Gln Ile Phe Arg  
485 490 495  
Phe Thr Glu Glu Gly Met Val Asn Ala Arg Phe Asp Tyr Asn Tyr Asp  
500 505 510  
Asn Ser Phe Arg Val Thr Ser Met Gln Ala Val Ile Asn Glu Thr Pro  
515 520 525  
Leu Pro Ile Asp Leu Tyr Arg Tyr Asp Asp Val Ser Gly Lys Thr Glu  
530 535 540  
Gln Phe Gly Lys Phe Gly Val Ile Tyr Tyr Asp Ile Asn Gln Ile Ile  
545 550 555 560  
Thr Thr Ala Val Met Thr His Thr Lys His Phe Asp Ala Tyr Gly Arg  
565 570 575  
Met Lys Glu Val Gln Tyr Glu Ile Phe Arg Ser Leu Met Tyr Trp Met  
580 585 590  
Thr Val Gln Tyr Asp Asn Met Gly Arg Val Val Lys Lys Glu Leu Lys  
595 600 605  
Val Gly Pro Tyr Ala Asn Thr Thr Arg Tyr Ser Tyr Glu Tyr Asp Ala  
610 615 620  
Asp Gly Gln Leu Gln Thr Val Ser Ile Asn Asp Lys Pro Leu Trp Arg  
625 630 635 640  
Tyr Ser Tyr Asp Leu Asn Gly Asn Leu His Leu Leu Ser Pro Gly Asn  
645 650 655  
Ser Ala Arg Leu Thr Pro Leu Arg Tyr Asp Ile Arg Asp Arg Ile Thr  
660 665 670  
Arg Leu Gly Asp Val Gln Tyr Lys Met Asp Glu Asp Gly Phe Leu Arg



675 680 685  
Gln Arg Gly Gly Asp Ile Phe Glu Tyr Asn Ser Ala Gly Leu Leu Ile  
690 695 700  
Lys Ala Tyr Asn Arg Ala Gly Ser Trp Ser Val Arg Tyr Arg Tyr Asp  
705 710 715 720  
Gly Leu Gly Arg Arg Val Ser Ser Lys Ser Ser His Ser His His Leu  
725 730 735  
Gln Phe Phe Tyr Ala Asp Leu Thr Asn Pro Thr Lys Val Thr His Leu  
740 745 750  
Tyr Asn His Ser Ser Ser Glu Ile Thr Ser Leu Tyr Tyr Asp Leu Gln  
755 760 765  
Gly His Leu Phe Ala Met Glu Leu Ser Ser Gly Asp Glu Phe Tyr Ile  
770 775 780  
Ala Cys Asp Asn Ile Gly Thr Pro Leu Ala Val Phe Ser Gly Thr Gly  
785 790 795 800  
Leu Met Ile Lys Gln Ile Leu Tyr Thr Ala Tyr Gly Glu Ile Tyr Met  
805 810 815  
Asp Thr Asn Pro Asn Phe Gln Ile Ile Ile Gly Tyr His Gly Gly Leu  
820 825 830  
Tyr Asp Pro Leu Thr Lys Leu Val His Met Gly Arg Arg Asp Tyr Asp  
835 840 845  
Val Leu Ala Gly Arg Trp Thr Ser Pro Asp His Glu Leu Trp Lys His  
850 855 860  
Leu Ser Ser Ser Asn Val Met Pro Phe Asn Leu Tyr Met Phe Lys Asn  
865 870 875 880  
Asn Asn Pro Ile Ser Asn Ser Gln Asp Ile Lys Cys Phe Met Thr Glu  
885 890 895  
Arg Thr Lys Asp Phe Leu Pro Lys Thr Ala Thr Leu Leu Trp Pro His  
900 905 910

Thr

&lt;210&gt; 2972

&lt;211&gt; 1269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

Met Ala Gln Ser Ser Pro Ala Pro Phe Gln Val Leu Val Ser Pro Tyr

1 5 10 15

Gly Leu Asn Gly Thr Leu Thr Gly Gln Ala Tyr Lys Met Ser Asp Pro

20 25 30

Ala Thr Arg Lys Leu Ile Glu Glu Trp Gln Tyr Phe Tyr Pro Met Val

35 40 45

Leu Lys Lys Lys Glu Glu Ser Lys Glu Glu Asp Glu Leu Gly Tyr Asp

50 55 60

Asp Asp Phe Pro Val Ala Val Glu Val Ile Val Gly Gly Val Arg Met

65 70 75 80

Val Tyr Pro Ser Ala Phe Val Leu Ile Ser Gln Asn Asp Ile Pro Val

85 90 95

Pro Gln Ser Val Ala Ser Ala Gly Gly His Ile Ala Val Gly Gln Gln

100 105 110

Gly Leu Gly Ser Val Lys Asp Pro Ser Asn Cys Gly Met Pro Leu Thr

115 120 125

Pro Pro Thr Ser Pro Glu Gln Ala Ile Leu Gly Glu Ser Gly Gly Met

130 135 140

Gln Ser Ala Ala Ser His Leu Val Ser Gln Asp Gly Gly Met Ile Thr

145                      150                      155                      160  
Met His Ser Pro Lys Arg Ser Gly Lys Ile Pro Pro Lys Leu His Asn  
                                 165                      170                      175  
His Met Val His Arg Val Trp Lys Glu Cys Ile Leu Asn Arg Thr Gln  
                                 180                      185                      190  
Ser Lys Arg Ser Gln Met Ser Thr Pro Thr Leu Glu Glu Glu Pro Ala  
                                 195                      200                      205  
Ser Asn Pro Ala Thr Trp Asp Phe Val Asp Pro Thr Gln Arg Val Ser  
                                 210                      215                      220  
Cys Ser Cys Ser Arg His Lys Leu Leu Lys Arg Cys Ala Val Gly Pro  
225                      230                      235                      240  
Asn Arg Pro Pro Thr Val Ser Gln Pro Gly Phe Ser Ala Gly Pro Ser  
                                 245                      250                      255  
Ser Ser Ser Ser Leu Pro Pro Pro Ala Ser Ser Lys His Lys Thr Ala  
                                 260                      265                      270  
Glu Arg Gln Glu Lys Gly Asp Lys Leu Gln Lys Arg Pro Leu Ile Pro  
                                 275                      280                      285  
Phe His His Arg Pro Ser Val Ala Glu Glu Leu Cys Met Glu Gln Asn  
                                 290                      295                      300  
Thr Pro Gly Gln Lys Leu Gly Leu Ala Gly Ile Asp Ser Ser Leu Glu  
305                      310                      315                      320  
Val Ser Ser Ser Arg Lys Tyr Asp Lys Gln Met Val Val Pro Ser Arg  
                                 325                      330                      335  
Asn Thr Ser Lys Gln Met Asn Leu Asn Pro Met Asp Ser Pro His Ser  
                                 340                      345                      350  
Pro Ile Ser Pro Leu Pro Pro Thr Leu Ser Pro Gln Pro Arg Gly Gln  
                                 355                      360                      365  
Glu Thr Glu Ser Leu Asp Pro Pro Ser Val Pro Val Asn Pro Ala Leu  
                                 370                      375                      380

Tyr Gly Asn Gly Leu Glu Leu Gln Gln Leu Ser Thr Leu Asp Asp Arg  
385 390 395 400  
Thr Val Leu Val Gly Gln Arg Leu Pro Leu Met Ala Glu Val Ser Glu  
405 410 415  
Thr Ala Leu Tyr Cys Gly Ile Arg Pro Ser Asn Pro Glu Ser Ser Glu  
420 425 430  
Lys Trp Trp His Ser Tyr Arg Leu Pro Pro Ser Asp Asp Ala Glu Phe  
435 440 445  
Arg Pro Pro Glu Leu Gln Gly Glu Arg Cys Asp Ala Lys Met Glu Val  
450 455 460  
Asn Ser Glu Ser Thr Ala Leu Gln Arg Leu Leu Ala Gln Pro Asn Lys  
465 470 475 480  
Arg Phe Lys Ile Trp Gln Asp Lys Gln Pro Gln Leu Gln Pro Leu His  
485 490 495  
Phe Leu Asp Pro Leu Pro Leu Ser Gln Gln Pro Gly Asp Ser Leu Gly  
500 505 510  
Glu Val Asn Asp Pro Tyr Thr Phe Glu Asp Gly Asp Ile Lys Tyr Ile  
515 520 525  
Phe Thr Ala Asn Lys Lys Cys Lys Gln Gly Thr Glu Lys Asp Ser Leu  
530 535 540  
Lys Lys Asn Lys Ser Glu Asp Gly Phe Gly Thr Lys Asp Val Thr Thr  
545 550 555 560  
Pro Gly His Ser Thr Pro Val Pro Asp Gly Lys Asn Ala Met Ser Ile  
565 570 575  
Phe Ser Ser Ala Thr Lys Thr Asp Val Arg Gln Asp Asn Ala Ala Gly  
580 585 590  
Arg Ala Gly Ser Ser Ser Leu Thr Gln Val Thr Asp Leu Ala Pro Ser  
595 600 605  
Leu His Asp Leu Asp Asn Ile Phe Asp Asn Ser Asp Asp Glu Leu

610                      615                      620  
Gly Ala Val Ser Pro Ala Leu Arg Ser Ser Lys Met Pro Ala Val Gly  
625                      630                      635                      640  
Thr Glu Asp Arg Pro Leu Gly Lys Asp Gly Arg Ala Ala Val Pro Tyr  
                    645                      650                      655  
Pro Pro Thr Val Ala Asp Leu Gln Arg Met Phe Pro Thr Pro Pro Ser  
                    660                      665                      670  
Leu Glu Gln His Pro Ala Phe Ser Pro Val Met Asn Tyr Lys Asp Gly  
                    675                      680                      685  
Ile Ser Ser Glu Thr Val Thr Ala Leu Gly Met Met Glu Ser Pro Met  
                    690                      695                      700  
Val Ser Met Val Ser Thr Gln Leu Thr Glu Phe Lys Met Glu Val Glu  
705                      710                      715                      720  
Asp Gly Leu Gly Ser Pro Lys Pro Glu Glu Ile Lys Asp Phe Ser Tyr  
                    725                      730                      735  
Val His Lys Val Pro Ser Phe Gln Pro Phe Val Gly Ser Ser Met Phe  
                    740                      745                      750  
Ala Pro Leu Lys Met Leu Pro Ser His Cys Leu Leu Pro Leu Lys Ile  
                    755                      760                      765  
Pro Asp Ala Cys Leu Phe Arg Pro Ser Trp Ala Ile Pro Pro Lys Ile  
                    770                      775                      780  
Glu Gln Leu Pro Met Pro Pro Ala Ala Thr Phe Ile Arg Asp Gly Tyr  
785                      790                      795                      800  
Asn Asn Val Pro Ser Val Gly Ser Leu Ala Asp Pro Asp Tyr Leu Asn  
                    805                      810                      815  
Thr Pro Gln Met Asn Thr Pro Val Thr Leu Asn Ser Ala Ala Pro Ala  
                    820                      825                      830  
Ser Asn Ser Gly Ala Gly Val Leu Pro Ser Pro Ala Thr Pro Arg Phe  
                    835                      840                      845

Ser Val Pro Thr Pro Arg Thr Pro Arg Thr Pro Arg Thr Pro Arg Gly  
850 855 860  
Gly Gly Thr Ala Ser Gly Gln Gly Ser Val Lys Tyr Asp Ser Thr Asp  
865 870 875 880  
Gln Gly Ser Pro Ala Ser Thr Pro Ser Thr Thr Arg Pro Leu Asn Ser  
885 890 895  
Val Glu Pro Ala Thr Met Gln Pro Ile Pro Glu Ala His Ser Leu Tyr  
900 905 910  
Val Thr Leu Ile Leu Ser Asp Ser Val Met Asn Ile Phe Lys Asp Arg  
915 920 925  
Asn Phe Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly  
930 935 940  
Ala Asp Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr  
945 950 955 960  
Arg Cys Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr  
965 970 975  
Asn Ser Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn  
980 985 990  
Ser Asp Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser  
995 1000 1005  
Thr Phe Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro  
1010 1015 1020  
Ile Ser Leu Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala  
1025 1030 1035 1040  
Ser Leu Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu  
1045 1050 1055  
Pro Cys Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp  
1060 1065 1070  
Tyr Trp Thr Glu Cys Phe Asn Ala Leu Glu Gln Gly Arg Gln Tyr Val

1075	1080	1085
Asp Asn Pro Thr Gly Gly Lys Val	Asp Glu Ala Leu Val	Arg Ser Ala
1090	1095	1100
Thr Val His Ser Trp Pro His Ser Asn Val	Leu Asp Ile Ser Met Leu	
1105	1110	1115
Ser Ser Gln Asp Val Val Arg Met Leu Leu Ser Leu	Gln Pro Phe Leu	
1125	1130	1135
Gln Asp Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr	Trp Glu Asn Ile	
1140	1145	1150
Gln His Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His	Lys Met Ala	
1155	1160	1165
Gly Arg Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu	Pro Ile	
1170	1175	1180
Pro Thr Leu Leu Val Gly Tyr Asp Lys Asp Phe Leu Thr Ile Ser	Pro	
1185	1190	1195
Phe Ser Leu Pro Phe Trp Glu Arg Leu Leu Leu Asp Pro Tyr Gly Gly		
1205	1210	1215
His Arg Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu		
1220	1225	1230
Leu Glu Gly Ala Lys Thr Phe Phe Arg Asp Leu Ser Ala Val Tyr Glu		
1235	1240	1245
Met Cys Arg Leu Gly Gln His Lys Pro Ile Cys Lys Val Leu Arg Asp		
1250	1255	1260
Gly Ile Met Arg Met		
1265		

&lt;210&gt; 2973

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2973

Met Leu Thr Ala Val Cys Gly Ser Leu Gly Ser Gln His Thr Glu Ala  
1 5 10 15  
Pro His Ala Ser Pro Pro Arg Leu Asp Leu Gln Pro Leu Gln Thr Tyr  
20 25 30  
Gln Gly His Thr Ser Pro Glu Ala Gly Asp Tyr Pro Ser Pro Leu Gln  
35 40 45  
Pro Gly Glu Leu Gln Ser Leu Pro Leu Gly Pro Glu Val Asp Phe Ser  
50 55 60  
Gln Gly Tyr Glu Leu Pro Gly Ala Ser Ser Arg Val Thr Cys Glu Asp  
65 70 75 80  
Leu Glu Ser Asp Ser Pro Leu Ala Pro Gly Pro Phe Ser Lys Leu Leu  
85 90 95  
Gln Pro Asp Met Ser His His Tyr Glu Ser Trp Phe Arg Pro Thr His  
100 105 110  
Pro Gly Ala Glu Asp Gly Ser Trp Trp Asp Leu His Pro Gly Thr Ser  
115 120 125  
Trp Met Asp Leu Pro His Thr Gln Gly Ala Leu Thr Ser Pro Gly His  
130 135 140  
Pro Gly Ala Leu Gln Ala Gly Leu Gly Gly Tyr Val Gly Asp His Gln  
145 150 155 160  
Leu Cys Ala Pro Pro Pro His Pro His Ala His His Leu Leu Pro Ala  
165 170 175  
Ala Gly Gly Gln His Leu Leu Gly Pro Pro Asp Gly Ala Lys Ala Leu  
180 185 190  
Glu Val Ala Ala Pro Glu Ser Gln Gly Leu Asp Ser Ser Leu Asp Gly



195 200 205  
Ala Ala Arg Pro Lys Gly Ser Arg Arg Ser Val Pro Arg Ser Ser Gly  
210 215 220  
Gln Thr Val Cys Arg Cys Pro Asn Cys Leu Glu Ala Glu Arg Leu Gly  
225 230 235 240  
Ala Pro Cys Gly Pro Asp Gly Gly Lys Lys Lys His Leu His Asn Cys  
245 250 255  
His Ile Pro Gly Cys Gly Lys Ala Tyr Ala Lys Thr Ser His Leu Lys  
260 265 270  
Ala His Leu Arg Trp His Ser Gly Asp Arg Pro Phe Val Cys Asn Trp  
275 280 285  
Leu Phe Cys Gly Lys Arg Phe Ala Arg Ser Asp Glu Leu Gln Arg His  
290 295 300  
Leu Gln Thr His Thr Gly Thr Lys Lys Phe Pro Cys Ala Val Cys Ser  
305 310 315 320  
Arg Val Phe Met Arg Ser Asp His Leu Ala Lys His Met Lys Thr His  
325 330 335  
Glu Gly Ala Lys Glu Glu Ala Ala Gly Ala Ala Ser Gly Glu Gly Lys  
340 345 350  
Ala Gly Gly Ala Val Glu Pro Pro Gly Gly Lys Gly Lys Arg Glu Ala  
355 360 365  
Glu Gly Ser Val Ala Pro Ser Asn  
370 375

&lt;210&gt; 2974

&lt;211&gt; 1176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2974

Met Ala Leu Ala Arg Pro Gly Thr Pro Asp Pro Gln Ala Leu Ala Ser  
 1 5 10 15  
 Val Leu Leu Leu Leu Leu Trp Ala Pro Ala Leu Ser Leu Leu Ala Gly  
 20 25 30  
 Thr Val Pro Ser Glu Pro Pro Ser Ala Cys Ala Ser Asp Pro Cys Ala  
 35 40 45  
 Pro Gly Thr Glu Cys Gln Ala Thr Glu Ser Gly Gly Tyr Thr Cys Gly  
 50 55 60  
 Pro Met Glu Pro Arg Gly Cys Ala Thr Gln Pro Cys His His Gly Ala  
 65 70 75 80  
 Leu Cys Val Pro Gln Gly Pro Asp Pro Asn Gly Phe Arg Cys Tyr Cys  
 85 90 95  
 Val Pro Gly Phe Gln Gly Pro Arg Cys Glu Leu Asp Ile Asp Glu Cys  
 100 105 110  
 Ala Ser Arg Pro Cys His His Gly Ala Thr Cys Arg Asn Leu Ala Asp  
 115 120 125  
 Arg Tyr Glu Cys His Cys Pro Leu Gly Tyr Ala Gly Val Thr Cys Glu  
 130 135 140  
 Thr Glu Val Asp Glu Cys Ala Ser Ala Pro Cys Leu His Gly Ala Ser  
 145 150 155 160  
 Cys Leu Asp Gly Val Gly Ser Phe Arg Cys Val Cys Ala Pro Gly Tyr  
 165 170 175  
 Gly Gly Thr Arg Cys Gln Leu Asp Leu Asp Glu Cys Gln Ser Gln Pro  
 180 185 190  
 Cys Ala His Gly Gly Thr Cys His Asp Leu Val Asn Gly Phe Arg Cys  
 195 200 205  
 Asp Cys Ala Gly Thr Gly Tyr Glu Gly Thr His Cys Glu Arg Glu Val

210 215 220  
Leu Glu Cys Ala Ser Ala Pro Cys Glu His Asn Ala Ser Cys Leu Glu  
225 230 235 240  
Gly Leu Gly Ser Phe Arg Cys Leu Cys Trp Pro Gly Tyr Ser Gly Glu  
245 250 255  
Leu Cys Glu Val Asp Glu Asp Glu Cys Ala Ser Ser Pro Cys Gln His  
260 265 270  
Gly Gly Arg Cys Leu Gln Arg Ser Asp Pro Ala Leu Tyr Gly Gly Val  
275 280 285  
Gln Ala Ala Phe Pro Gly Ala Phe Ser Phe Arg His Ala Ala Gly Phe  
290 295 300  
Leu Cys His Cys Pro Pro Gly Phe Glu Gly Ala Asp Cys Gly Val Glu  
305 310 315 320  
Val Asp Glu Cys Ala Ser Arg Pro Cys Leu Asn Gly Gly His Cys Gln  
325 330 335  
Asp Leu Pro Asn Gly Phe Gln Cys His Cys Pro Asp Gly Tyr Ala Gly  
340 345 350  
Pro Thr Cys Glu Glu Asp Val Asp Glu Cys Leu Ser Asp Pro Cys Leu  
355 360 365  
His Gly Gly Thr Cys Ser Asp Thr Val Ala Gly Tyr Ile Cys Arg Cys  
370 375 380  
Pro Glu Thr Trp Gly Gly Arg Asp Cys Ser Val Gln Leu Thr Gly Cys  
385 390 395 400  
Gln Gly His Thr Cys Pro Leu Ala Ala Thr Cys Ile Pro Ile Phe Glu  
405 410 415  
Ser Gly Val His Ser Tyr Val Cys His Cys Pro Pro Gly Thr His Gly  
420 425 430  
Pro Phe Cys Gly Gln Asn Thr Thr Phe Ser Val Met Ala Gly Ser Pro  
435 440 445

Ile Gln Ala Ser Val Pro Ala Gly Gly Pro Leu Gly Leu Ala Leu Arg  
450 455 460

Phe Arg Thr Thr Leu Pro Ala Gly Thr Leu Ala Thr Arg Asn Asp Thr  
465 470 475 480

Lys Glu Ser Leu Glu Leu Ala Leu Val Ala Ala Thr Leu Gln Ala Thr  
485 490 495

Leu Trp Ser Tyr Ser Thr Thr Val Leu Val Leu Arg Leu Pro Asp Leu  
500 505 510

Ala Leu Asn Asp Gly His Trp His Gln Val Glu Val Val Leu His Leu  
515 520 525

Ala Thr Leu Glu Leu Arg Leu Trp His Glu Gly Cys Pro Ala Arg Leu  
530 535 540

Cys Val Ala Ser Gly Pro Val Ala Leu Ala Ser Thr Ala Ser Ala Thr  
545 550 555 560

Pro Leu Pro Ala Gly Ile Ser Ser Ala Gln Leu Gly Asp Ala Thr Phe  
565 570 575

Ala Gly Cys Leu Gln Asp Val Arg Val Asp Gly His Leu Leu Leu Pro  
580 585 590

Glu Asp Leu Gly Glu Asn Val Leu Leu Gly Cys Glu Arg Arg Glu Gln  
595 600 605

Cys Arg Pro Leu Pro Cys Val His Gly Gly Ser Cys Val Asp Leu Trp  
610 615 620

Thr His Phe Arg Cys Asp Cys Ala Arg Pro His Arg Gly Pro Thr Cys  
625 630 635 640

Ala Asp Glu Ile Pro Ala Ala Thr Phe Gly Leu Gly Gly Ala Pro Ser  
645 650 655

Ser Ala Ser Phe Leu Leu Gln Glu Leu Pro Gly Pro Asn Leu Thr Val  
660 665 670

Ser Phe Leu Leu Arg Thr Arg Glu Ser Ala Gly Leu Leu Leu Gln Phe

675 680 685  
Ala Asn Asp Ser Ala Ala Gly Leu Thr Val Phe Leu Ser Glu Gly Arg  
690 695 700  
Ile Arg Ala Glu Ala Pro Gly Ser Pro Ala Val Val Leu Pro Gly Arg  
705 710 715 720  
Trp Asp Asp Gly Leu Arg His Leu Val Met Leu Ser Phe Gly Pro Asp  
725 730 735  
Gln Leu Gln Asp Leu Gly Gln His Val His Val Gly Gly Arg Leu Leu  
740 745 750  
Ala Ala Asp Ser Gln Pro Trp Gly Gly Pro Phe Arg Gly Cys Leu Gln  
755 760 765  
Asp Leu Arg Leu Asp Gly Cys His Leu Pro Phe Phe Pro Leu Pro Leu  
770 775 780  
Asp Asn Ser Ser Gln Pro Ser Glu Leu Gly Gly Arg Gln Ser Trp Asn  
785 790 795 800  
Leu Thr Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys  
805 810 815  
Phe Asn Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr  
820 825 830  
Cys Pro Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys  
835 840 845  
Pro Gly Gln Pro Cys Leu Pro Pro Ala Thr Cys Glu Glu Val Pro Asp  
850 855 860  
Gly Phe Val Cys Val Ala Glu Ala Thr Phe Arg Glu Gly Pro Pro Ala  
865 870 875 880  
Ala Phe Ser Gly His Asn Ala Ser Ser Gly Arg Leu Leu Gly Gly Leu  
885 890 895  
Ser Leu Ala Phe Arg Thr Arg Asp Ser Glu Ala Trp Leu Leu Arg Ala  
900 905 910

Ala Ala Gly Ala Leu Glu Gly Val Trp Leu Ala Val Arg Asn Gly Ser  
915 920 925

Leu Ala Gly Gly Val Arg Gly Gly His Gly Leu Pro Gly Ala Val Leu  
930 935 940

Pro Ile Pro Gly Pro Arg Val Ala Asp Gly Ala Trp His Arg Val Arg  
945 950 955 960

Leu Ala Met Glu Arg Pro Ala Ala Ala Thr Ser Arg Trp Leu Leu Trp  
965 970 975

Leu Asp Gly Ala Ala Thr Pro Val Ala Leu Arg Gly Leu Ala Ser Asp  
980 985 990

Leu Gly Phe Leu Gln Gly Pro Gly Ala Val Arg Ile Leu Leu Ala Glu  
995 1000 1005

Asn Phe Thr Gly Cys Leu Gly Arg Val Ala Leu Gly Gly Leu Pro Leu  
1010 1015 1020

Pro Leu Ala Arg Pro Arg Pro Gly Ala Ala Pro Gly Ala Arg Glu His  
1025 1030 1035 1040

Phe Ala Ser Trp Pro Gly Thr Pro Ala Pro Ile Leu Gly Cys Arg Gly  
1045 1050 1055

Ala Pro Val Cys Ala Pro Ser Pro Cys Leu His Asp Gly Ala Cys Arg  
1060 1065 1070

Asp Leu Phe Asp Ala Phe Ala Cys Ala Cys Gly Pro Gly Trp Glu Gly  
1075 1080 1085

Pro Arg Cys Glu Ala His Val Asp Pro Cys His Ser Ala Pro Cys Ala  
1090 1095 1100

Arg Gly Arg Cys His Thr His Pro Asp Gly Arg Phe Glu Cys Arg Cys  
1105 1110 1115 1120

Pro Pro Gly Phe Gly Gly Pro Arg Cys Arg Trp Asp Gly Trp Ala Gly  
1125 1130 1135

Gly Trp Ala Ala Asn Ala Pro Trp Gly Tyr Gly Gly Ala Glu Lys Ser

1140	1145	1150
Ala Arg Ser Val Asp Glu Ser Leu Pro Phe Pro Gly Pro His Val Leu		
1155	1160	1165
Ile Cys Asp Met Arg Arg Thr Val		
1170	1175	

&lt;210&gt; 2975

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2975

Met Glu Tyr Thr Gly Ser Lys Tyr Ile Gly Glu Tyr Val Asp Gly Arg		
1	5	10
Met Glu Gly Lys Ala Lys Tyr Ile Leu Pro Thr Glu Thr Ile Tyr Val		
20	25	30
Gly Glu Met Lys Asp Gly Met Phe His Gly Glu Gly Ala Leu Tyr Phe		
35	40	45
Pro Ser Gly Ser Gln Tyr Asp Ala Ile Trp Glu Asn Gly Leu Ala Ile		
50	55	60
Lys Gly Thr Tyr Thr Phe Ser Asp Gly Leu His Tyr Asp Glu Lys Asn		
65	70	75
Trp His Tyr Cys Asp Gly Tyr Asp Arg Arg Phe Tyr Thr Glu Ile Leu		
85	90	95
Asn Gly Leu Lys Pro Ala Gly Met Ala Gln Leu Thr Asn Met Asp Pro		
100	105	110
Pro Arg Lys Ile Pro Lys Gly Tyr Tyr Asp Cys Gly Asp Gly Phe Tyr		
115	120	125

Asn Pro Val Thr Arg Val Val Lys Asp Tyr Arg Asn Arg Phe Leu Arg  
 130 135 140  
 Asn Ala Asp Asp Asp Glu His Glu Trp Ile Thr Arg Thr Cys Arg Lys  
 145 150 155 160  
 Gly

<210> 2976

<211> 1181

<212> PRT

<213> Homo sapiens

<400> 2976

Met Ala Ala Val Gln Val Val Gly Ser Trp Pro Ser Val Gln Pro Arg  
 1 5 10 15  
 Glu Ala Pro Arg Glu Ala Ile Pro Glu Arg Gly Asn Gly Phe Arg Leu  
 20 25 30  
 Leu Ser Ala Arg Leu Cys Ala Leu Arg Pro Asp Asp Ser Ser Ser Ala  
 35 40 45  
 Arg Thr Glu Ile His Leu Leu Phe Asp Gln Leu Ile Ser Glu Asn Tyr  
 50 55 60  
 Ser Glu Gly Ser Gly Val Ala Pro Glu Asp Val Ser Ala Leu Leu Val  
 65 70 75 80  
 Gln Ala Cys Arg Leu Val Pro Leu Asn Gln Asn His Leu Val Ser Lys  
 85 90 95  
 Val Ser Gln Leu Ile His His Leu Leu Asn Arg Leu Gln Val Ile Val  
 100 105 110  
 Asp Glu Gln His Leu Asp Phe Leu Leu Ala Tyr Thr Ile Ser Ala Ile



115 120 125  
His Gln Cys Ser Ser Trp Thr His Arg Glu Ile Leu Gln Ala Leu Ala  
130 135 140  
Ala Leu Val Tyr Cys Asn Gly Ser Lys Cys Gln Lys Tyr Leu Pro Glu  
145 150 155 160  
Leu Leu Gly Asn Thr Gly Leu Leu Met Lys Leu Ser Asp Leu Ala Gln  
165 170 175  
Ser Asp Pro Glu Val Arg Arg Ala Ala Val His Cys Met Ala Asn Leu  
180 185 190  
Cys Leu Ser Val Pro Gly Gln Pro Tyr Leu Glu Glu Pro Tyr Gln Asn  
195 200 205  
Val Cys Phe Gln Ala Phe Leu Thr Ile Leu Gln Ser Pro Lys Ser Ser  
210 215 220  
Asp Met Asp Asp Ile Thr Phe Cys Met Leu Leu Gln Asn Ala Leu Lys  
225 230 235 240  
Gly Ile Gln Ser Leu Leu Asn Gly Gly Arg Met Lys Leu Thr Gln Thr  
245 250 255  
Asp Glu Leu Gly Ala Leu Leu Ala Val Leu Lys Lys Phe Met Phe His  
260 265 270  
Gly Leu Pro Gly Leu Asn Ile Glu Met Pro Thr Val Leu Tyr Pro Thr  
275 280 285  
Pro Leu Pro Gln Tyr Asp Gly Arg Thr Pro Ile Lys Pro Gln Gln Ser  
290 295 300  
Glu Ser Ser Ala Ser Arg Pro Thr Leu Asn Lys Lys Lys Lys Ser Lys  
305 310 315 320  
Val Lys Pro Lys Lys Ile Gln Gln Gly Glu Glu Glu Glu Lys Glu Ser  
325 330 335  
Ser Gly Glu Ile Glu Ala Ala Pro Val Thr Gly Thr Gly Arg Val Asn  
340 345 350

Leu His Glu Gly Asn Thr Trp Cys Pro Ser Ser Leu Gly Val Gln Ser  
355 360 365  
Leu Pro Leu Asp Gly Ser Gly Ala Ala Glu Lys Asp Gly Val Ser Ser  
370 375 380  
Ser Phe Ser Ser Ser Ser Trp Lys Arg Val Ser Ser Ser Glu Ser Asp  
385 390 395 400  
Phe Ser Asp Ala Glu Gly Gly Met Gln Ser Lys Met Arg Ser Tyr Gln  
405 410 415  
Ala Lys Val Arg Gln Gly Ala Leu Val Cys Phe Leu Ser Thr Ile Lys  
420 425 430  
Ser Ile Glu Lys Lys Val Leu Tyr Gly Tyr Trp Ser Ala Phe Ile Pro  
435 440 445  
Asp Thr Pro Glu Leu Gly Ser Pro Gln Ser Val Ser Leu Met Thr Leu  
450 455 460  
Thr Leu Lys Asp Pro Ser Pro Lys Thr Arg Ala Cys Ala Leu Gln Val  
465 470 475 480  
Leu Ser Ala Ile Leu Glu Gly Ser Lys Gln Phe Leu Ser Val Ala Glu  
485 490 495  
Asp Thr Ser Asp His Arg Arg Ala Phe Thr Pro Phe Ser Val Met Ile  
500 505 510  
Ala Cys Ser Ile Arg Glu Leu His Arg Cys Leu Leu Leu Ala Leu Val  
515 520 525  
Ala Glu Ser Ser Ser Gln Thr Val Thr Gln Ile Ile Lys Cys Leu Ala  
530 535 540  
Asn Leu Val Ser Asn Ala Pro Tyr Asp Arg Leu Lys Leu Ser Leu Leu  
545 550 555 560  
Thr Lys Val Trp Asn Gln Ile Lys Pro Tyr Ile Arg His Lys Asp Val  
565 570 575  
Asn Val Arg Val Ser Ser Leu Thr Leu Leu Gly Ala Ile Val Ser Thr

580 585 590  
His Ala Pro Leu Pro Glu Val Gln Leu Leu Leu Gln Gln Pro Cys Ser  
595 600 605  
Ser Gly Leu Gly Asn Ser Asn Ser Ala Thr Pro His Leu Ser Pro Pro  
610 615 620  
Asp Trp Trp Lys Lys Ala Pro Ala Gly Pro Ser Leu Glu Glu Thr Ser  
625 630 635 640  
Val Ser Ser Pro Lys Gly Ser Ser Glu Pro Cys Trp Leu Ile Arg Leu  
645 650 655  
Cys Ile Ser Ile Val Val Leu Pro Lys Glu Asp Ser Cys Ser Gly Ser  
660 665 670  
Asp Ala Gly Ser Ala Ala Gly Ser Thr Tyr Glu Pro Ser Pro Met Arg  
675 680 685  
Leu Glu Ala Leu Gln Val Leu Thr Leu Leu Ala Arg Gly Tyr Phe Ser  
690 695 700  
Met Thr Gln Ala Tyr Leu Met Glu Leu Gly Glu Val Ile Cys Lys Cys  
705 710 715 720  
Met Gly Glu Ala Asp Pro Ser Ile Gln Leu His Gly Ala Lys Leu Leu  
725 730 735  
Glu Glu Leu Gly Thr Gly Leu Ile Gln Gln Tyr Lys Pro Asp Ser Thr  
740 745 750  
Ala Ala Pro Asp Gln Arg Ala Pro Val Phe Leu Val Val Met Phe Trp  
755 760 765  
Thr Met Met Leu Asn Gly Pro Leu Pro Arg Ala Leu Gln Asn Ser Glu  
770 775 780  
His Pro Thr Leu Gln Ala Ser Ala Cys Asp Ala Leu Ser Ser Ile Leu  
785 790 795 800  
Pro Glu Ala Phe Ser Asn Leu Pro Asn Asp Arg Gln Met Leu Cys Ile  
805 810 815

Thr Val Leu Leu Gly Leu Asn Asp Ser Lys Asn Arg Leu Val Lys Ala  
820 825 830  
Ala Thr Ser Arg Ala Leu Gly Val Tyr Val Leu Phe Pro Cys Leu Arg  
835 840 845  
Gln Asp Val Ile Phe Val Ala Asp Ala Ala Asn Ala Ile Leu Met Ser  
850 855 860  
Leu Glu Asp Lys Ser Leu Asn Val Arg Ala Lys Ala Ala Trp Ser Leu  
865 870 875 880  
Gly Asn Leu Thr Asp Thr Leu Ile Val Asn Met Glu Thr Pro Asp Pro  
885 890 895  
Ser Phe Gln Glu Glu Phe Ser Gly Leu Leu Leu Leu Lys Met Leu Arg  
900 905 910  
Ser Ala Ile Glu Ala Ser Lys Asp Lys Asp Lys Val Lys Ser Asn Ala  
915 920 925  
Val Arg Ala Leu Gly Asn Leu Leu His Phe Leu Gln Pro Ser His Ile  
930 935 940  
Glu Lys Pro Thr Phe Ala Glu Ile Ile Glu Glu Ser Ile Gln Ala Leu  
945 950 955 960  
Ile Ser Thr Val Leu Thr Glu Ala Ala Met Lys Val Arg Trp Asn Ala  
965 970 975  
Cys Tyr Ala Met Gly Asn Val Phe Lys Asn Pro Ala Leu Pro Leu Gly  
980 985 990  
Thr Ala Pro Trp Thr Ser Gln Ala Tyr Asn Ala Leu Thr Ser Val Val  
995 1000 1005  
Thr Ser Cys Lys Asn Phe Lys Val Arg Ile Arg Ser Ala Ala Ala Leu  
1010 1015 1020  
Ser Val Pro Gly Lys Arg Glu Gln Tyr Gly Ser Val Asp Gln Tyr Ala  
1025 1030 1035 1040  
Arg Ile Trp Asn Ala Leu Val Thr Ala Leu Gln Lys Ser Glu Asp Thr

1045	1050	1055
Ile Asp Phe Leu Glu Phe Lys Tyr Cys Val Ser Leu Arg Thr Gln Ile		
1060	1065	1070
Cys Gln Ala Leu Ile His Leu Leu Ser Leu Ala Ser Ala Ser Asp Leu		
1075	1080	1085
Pro Cys Met Lys Glu Thr Leu Glu Leu Ser Gly Asn Met Val Gln Ser		
1090	1095	1100
Tyr Ile Leu Gln Phe Leu Lys Ser Gly Ala Glu Gly Asp Asp Thr Gly		
1105	1110	1115
Ala Pro His Ser Pro Gln Glu Arg Asp Gln Met Val Arg Met Ala Leu		
1125	1130	1135
Lys His Met Gly Ser Ile Gln Ala Pro Thr Gly Asp Thr Ala Arg Arg		
1140	1145	1150
Ala Ile Met Gly Phe Leu Glu Glu Ile Leu Ala Val Cys Phe Asp Ser		
1155	1160	1165
Ser Gly Ser Gln Gly Ala Leu Pro Gly Leu Thr Asn Gln		
1170	1175	1180

&lt;210&gt; 2977

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2977

Met Ser His Asp Leu Val Ala Val Gly Arg Lys Ser Glu Asn Phe His
1                      5                      10                      15
Pro Val Phe Glu His Leu Asp Ser Thr Gln Asn Thr Glu Asn Lys Pro
20                      25                      30

Thr Gly Glu Phe Ala Gln Glu Ile Ile Thr Ile Ile His Gln Val Lys  
35 40 45  
Ala Asn Tyr Phe Pro Ser Pro Gly Ile Thr Leu His Glu Arg Phe Ser  
50 55 60  
Thr Met Gln Asp Ile His Lys Ala Asp Val Asn Glu Ile Pro Leu Asn  
65 70 75 80  
Ser Asp Pro Glu Ile His Arg Arg Ile Asp Met Ser Leu Ala Glu Leu  
85 90 95  
Gln Ser Lys Gln Ala Val Ile Tyr Glu Ser Glu Gln Thr Leu Ile Lys  
100 105 110  
Ile Ile Asp Pro Asn Asp Leu Arg His Asp Ile Glu Arg Arg Arg Lys  
115 120 125  
Glu Arg Leu Gln Asn Glu Asp Glu His Ile Phe His Ile Ala Ser Ala  
130 135 140  
Ala Glu Arg Asp Asp Gln Asn Ser Ser Phe Ser Lys Val Lys Asn Val  
145 150 155 160  
His Thr Asp Gly Phe Gln Lys Pro Thr His Phe Ile Lys Ser Asn Phe  
165 170 175  
Arg Lys Cys Ile Glu Lys Pro Tyr Met Asn Tyr Thr Thr Gln Arg Lys  
180 185 190  
Asp Ile Ile Thr His Lys Pro Phe Glu Val Glu Gly Asn His Arg Asn  
195 200 205  
Thr Arg Val Arg Pro Phe Lys Ser Asn Phe Arg Gly Gly Arg Cys Gln  
210 215 220  
Pro Asn Tyr Lys Ser Gly Leu Val Gln Lys Ser Leu Tyr Ile Gln Ala  
225 230 235 240  
Lys Tyr Gln Arg Leu Arg Phe Thr Gly Pro Arg Gly Phe Ile Thr His  
245 250 255  
Lys Phe Arg Glu Arg Leu Met Arg Lys Lys Lys Glu Tyr Thr Asp Val



&lt;210&gt; 2979

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2979

Met Ala Ala Pro Glu Glu His Asp Ser Pro Thr Glu Ala Ser Gln Pro

1 5 10 15

Ile Val Glu Glu Glu Glu Thr Lys Thr Phe Lys Asp Leu Gly Val Thr

20 25 30

Asp Val Leu Cys Glu Ala Cys Asp Gln Leu Gly Trp Thr Lys Pro Thr

35 40 45

Lys Ile Gln Ile Glu Ala Ile Pro Leu Ala Leu Gln Gly Arg Asp Ile

50 55 60

Ile Gly Leu Ala Glu Thr Gly Ser Gly Lys Thr Gly Ala Phe Ala Leu

65 70 75 80

Pro Ile Leu Asn Ala Leu Leu Glu Thr Pro Gln Arg Leu Phe Ala Leu

85 90 95

Val Leu Thr Pro Thr Arg Glu Leu Ala Phe Gln Ile Ser Glu Gln Phe

100 105 110

Glu Ala Leu Gly Ser Ser Ile Gly Val Gln Ser Ala Val Ile Val Gly

115 120 125

Gly Ile Asp Ser Met Ser Gln Ser Leu Ala Leu Ala Lys Lys Pro His

130 135 140

Ile Ile Ile Ala Thr Pro Gly Arg Leu Ile Asp His Leu Glu Asn Thr

145 150 155 160

Lys Gly Phe Asn Leu Arg Ala Leu Lys Tyr Leu Val Met Asp Glu Ala



165	170	175
Asp Arg Ile Leu Asn Met Asp Phe Glu Thr Glu Val Asp Lys Ile Leu		
180	185	190
Lys Val Ile Pro Arg Asp Arg Lys Thr Phe Leu Phe Ser Ala Thr Met		
195	200	205
Thr Lys Lys Val Gln Lys Leu Gln Arg Ala Ala Leu Lys Asn Pro Val		
210	215	220
Lys Cys Ala Val Ser Ser Lys Tyr Gln Thr Val Glu Lys Leu Gln Gln		
225	230	235
240		
Tyr Tyr Ile Phe Ile Pro Ser Lys Phe Lys Asp Thr Tyr Leu Val Tyr		
245	250	255
Ile Leu Asn Glu Leu Ala Gly Asn Ser Phe Met Ile Phe Cys Ser Thr		
260	265	270
Cys Asn Asn Thr Gln Arg Thr Ala Leu Leu Leu Arg Asn Leu Gly Phe		
275	280	285
Thr Ala Ile Pro Leu His Gly Gln Met Ser Gln Ser Lys Arg Leu Gly		
290	295	300
Ser Leu Asn Lys Phe Lys Ala Lys Ala Arg Ser Ile Leu Leu Ala Thr		
305	310	315
320		
Asp Val Ala Ser Arg Gly Leu Asp Ile Pro His Val Asp Val Val Val		
325	330	335
Asn Phe Asp Ile Pro Thr His Ser Lys Asp Tyr Ile His Arg Val Gly		
340	345	350
Arg Thr Ala Arg Ala Gly Arg Ser Gly Lys Ala Ile Thr Phe Val Thr		
355	360	365
Gln Tyr Asp Val Glu Leu Phe Gln Arg Ile Glu His Leu Ile Gly Lys		
370	375	380
Lys Leu Pro Gly Phe Pro Thr Gln Asp Asp Glu Val Met Met Leu Thr		
385	390	395
400		

<210> 2980

<211> 576

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2980

出証特 2 0 0 4 - 3 0 5 9 6 6 1

100 105 110  
Glu Phe Val Gly Leu Val Phe Ser Glu Asn Glu Asn Ser Ala Ala Phe  
115 120 125  
Tyr Val Met Gly Ile Val His Gly Ala Ala Thr Tyr Leu Pro Asp Phe  
130 135 140  
Leu Asp Tyr Phe Ser Phe Asn Phe Pro Asn Ser Pro Val Lys Met Glu  
145 150 155 160  
Ile Leu Gly Lys Lys Asp Ile Glu Thr Thr Thr Met Ser Asn Phe His  
165 170 175  
Ala Gln Val Lys Arg Thr Tyr Ser His Gly Thr Tyr Arg Ala Gly Pro  
180 185 190  
Met Arg Gln Ile Ser Leu Val Gly Ala Val Asp Glu Glu Val Gly Asp  
195 200 205  
Tyr Phe Pro Glu Phe Leu Asp Met Leu Glu Glu Ser Pro Phe Leu Lys  
210 215 220  
Cys Thr Leu Pro Trp Gly Thr Leu Ser Ser Leu Lys Leu Gln Ser Arg  
225 230 235 240  
Lys Asp Ser Asp Asp Gly Pro Ile Met Trp Val Arg Pro Gly Glu Gln  
245 250 255  
Met Ile Pro Val Ala Asp Met Pro Lys Ser Pro Phe Lys Arg Lys Arg  
260 265 270  
Thr Thr Asn Glu Ile Lys Asn Leu Gln Tyr Leu Pro Arg Thr Ser Glu  
275 280 285  
Pro Arg Glu Met Leu Phe Glu Asp Arg Thr Arg Ala His Ala Asp His  
290 295 300  
Ile Gly Gln Gly Phe Glu Arg Gln Thr Thr Ala Ala Val Gly Val Leu  
305 310 315 320  
Lys Ala Val His Cys Gly Glu Trp Pro Asp Gln Pro Arg Ile Thr Lys  
325 330 335

Asp Val Ile Cys Phe His Ala Glu Asp Phe Leu Glu Val Val Gln Arg  
340 345 350  
Met Gln Leu Asp Leu His Glu Pro Pro Leu Ser Gln Cys Val Gln Trp  
355 360 365  
Val Asp Asp Ala Lys Leu Asn Gln Leu Arg Arg Glu Gly Ile Arg Tyr  
370 375 380  
Ala Arg Ile Gln Leu Tyr Asp Asn Asp Ile Tyr Phe Ile Pro Arg Asn  
385 390 395 400  
Val Val His Gln Phe Lys Thr Val Ser Ala Val Cys Ser Leu Ala Trp  
405 410 415  
His Ile Arg Leu Lys Leu Tyr His Ser Glu Glu Asp Thr Ser Gln Asn  
420 425 430  
Thr Ala Thr His Glu Thr Gly Thr Ser Ser Asp Ser Thr Ser Ser Val  
435 440 445  
Leu Gly Pro His Thr Asp Asn Met Ile Cys Ala Val Ser Lys Ala Ser  
450 455 460  
Leu Asp Ser Val Phe Ser Asp Lys Leu His Ser Lys Tyr Glu Leu Gln  
465 470 475 480  
Gln Ile Lys His Glu Pro Ile Ala Ser Val Arg Ile Lys Glu Glu Pro  
485 490 495  
Val Asn Val Asn Ile Pro Glu Lys Thr Thr Ala Leu Asn Asn Met Asp  
500 505 510  
Gly Lys Asn Val Lys Ala Lys Leu Asp His Val Gln Phe Ala Glu Phe  
515 520 525  
Lys Ile Asp Met Asp Ser Lys Phe Glu Asn Ser Asn Lys Asp Leu Lys  
530 535 540  
Glu Glu Leu Cys Pro Gly Asn Leu Ser Leu Val Asp Thr Arg Gln His  
545 550 555 560  
Ser Ser Ala His Ser Asn Gln Asp Lys Lys Asp Asp Asp Ile Leu Cys

565

570

575

&lt;210&gt; 2981

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2981

Met Asn Pro Phe Val Leu Ile Asp Leu Ala Gly Ala Phe Ala Leu Cys

1

5

10

15

Ile Thr Tyr Met Leu Ile Glu Ile Asn Asn Tyr Phe Ala Val Asp Thr

20

25

30

Ala Ser Ala Ile Ala Ile Ala Leu Met Thr Phe Gly Thr Met Tyr Pro

35

40

45

Met Ser Val Tyr Ser Gly Lys Val Leu Leu Gln Thr Thr Pro Pro His

50

55

60

Val Ile Gly Gln Leu Asp Lys Leu Ile Arg Glu Val Ser Thr Leu Asp

65

70

75

80

Gly Val Leu Glu Val Arg Asn Glu His Phe Trp Thr Leu Gly Phe Gly

85

90

95

Ser Leu Ala Gly Ser Val His Val Arg Ile Arg Arg Asp Ala Asn Glu

100

105

110

Gln Met Val Leu Ala His Val Thr Asn Arg Leu Tyr Thr Leu Val Ser

115

120

125

Thr Leu Thr Val Gln Ile Phe Lys Asp Asp Trp Ile Arg Pro Ala Leu

130

135

140

Leu Ser Gly Pro Val Ala Ala Asn Val Leu Asn Phe Ser Asp His His

145

150

155

160

Val Ile Pro Met Pro Leu Leu Lys Gly Thr Asp Asp Leu Asn Pro Val  
                                 165                                170                                175  
 Thr Ser Thr Pro Ala Lys Pro Ser Ser Pro Pro Pro Glu Phe Ser Phe  
                                 180                                185                                190  
 Asn Thr Pro Gly Lys Asn Val Asn Pro Val Ile Leu Leu Asn Thr Gln  
                                 195                                200                                205  
 Thr Arg Pro Tyr Gly Phe Gly Leu Asn His Gly His Thr Pro Tyr Ser  
                                 210                                215                                220  
 Ser Met Leu Asn Gln Gly Leu Gly Val Pro Gly Ile Gly Ala Thr Gln  
                                 225                                230                                235                                240  
 Gly Leu Arg Thr Gly Phe Thr Asn Ile Pro Ser Arg Tyr Gly Thr Asn  
                                 245                                250                                255  
 Asn Arg Ile Gly Gln Pro Arg Pro  
                                 260

<210> 2982

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2982

Met Gly Leu Leu Gly Gly Lys Gln Ile Gly Ala Gly Glu Pro Ala Glu  
           1                                5                                10                                15  
 Thr Ala Pro Cys Thr Val Leu Arg Val Arg Leu Lys His Thr Gln Thr  
                                 20                                25                                30  
 Ser Gly Val Ala Arg Ser Cys Cys Val Pro Glu Pro Leu Gly Pro Val  
                                 35                                40                                45  
 Ala Ala Thr Arg Gly Ile Pro Thr Arg Glu Asp Leu Ser Ile Val Leu

50                      55                      60  
 Lys Gly Arg Phe Arg Trp Arg Arg Pro Glu Asn Arg Leu Glu Cys Cys  
 65                      70                      75                      80  
 Leu Arg Ala Val Leu Pro Ala Gly Pro Glu Pro Ala Gln Thr Phe Thr  
                     85                      90                      95  
 Leu Thr Pro Ala Cys Arg Arg His Cys Cys Leu Val Met Leu Arg Ser  
                     100                      105                      110  
 Gly Leu Ser Ser Pro Ser Leu Thr Arg Gln Leu Gln Ser Pro Pro Tyr  
                     115                      120                      125  
 Leu Pro Thr Ala Glu Asn Gly Ala Cys Ile Lys Pro Ser Arg Glu Thr  
                     130                      135                      140  
 Gln Trp Gly Met Asp Pro Lys His Gly Arg Cys Thr His Phe Ala Phe  
 145                      150                      155                      160  
 Leu

<210> 2983

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2983

Met Leu Pro Ile Gln Pro Ala Glu Pro Ser Gly Phe Ser Arg Cys Gly  
 1                      5                      10                      15  
 Cys Cys Arg Glu Val Arg Ser Pro Thr Trp Arg Pro Arg Gly Leu Ala  
                     20                      25                      30  
 Leu Glu Thr Gly Gly Arg Ser Cys Gln Ser Leu Val Leu Gly Leu Ala  
                     35                      40                      45

Thr Gly Ile Ala Leu Leu Pro Pro Tyr Ser Ile Ala Gln Ala Val Thr  
 50 55 60  
 Glu Pro Thr Trp Leu Gln Gln Glu Gly Ala Arg Thr Pro Pro Pro Asn  
 65 70 75 80  
 Gly Ser Ser Gly Glu Glu Phe Thr Val Ile Phe Asn Leu Ser Tyr Pro  
 85 90 95  
 Leu Arg Arg Asn Arg Phe Ser Ala Thr  
 100 105

<210> 2984

<211> 618

<212> PRT

<213> Homo sapiens

<400> 2984

Met Glu Thr Glu Ala Ala Ser Thr Ala Val Arg Thr Gln Thr Gln Ala  
 1 5 10 15  
 Pro Arg Val Val Ala Thr Arg Ser Thr Pro Ser Thr Gln Thr Val Ala  
 20 25 30  
 Arg Ala Ser Arg Arg Ala Gln Ser Ile Thr Glu Ala Ala Thr Gly His  
 35 40 45  
 Ala Arg Thr Gln Pro Leu Ala Cys Asp Ala Ala Ala Pro Leu Asp Ser  
 50 55 60  
 His Cys Ser Arg Thr Gly Arg His Ala Lys Thr Ser Thr Ser Ala Trp  
 65 70 75 80  
 Ser Thr Thr Glu Ala Ala Thr Thr Ser Ala Ala Thr Pro Trp Ala Ala  
 85 90 95  
 Ser Ser Ala Ala Ala Gly Arg Ala Thr Ser Cys Ser Pro Thr Ser Ala



100 105 110  
Pro Ala Arg Thr Ser Thr Ser Ala Pro Ser Ser Gly Pro Val Thr Thr  
115 120 125  
Ser Ala Ser Thr Pro Gln Ala Arg Ala Lys Glu Thr Ala Arg Gln Pro  
130 135 140  
Leu Leu Asp His Cys His Val Thr Phe Val Thr Leu Lys Cys Asp Ser  
145 150 155 160  
Ser Lys Lys Arg Arg Arg Gly Arg Lys Ser Pro Ser Lys Glu Val Ser  
165 170 175  
His Ile Thr Ala Glu Phe Glu Ile Glu Thr Lys Met Glu Glu Ala Ser  
180 185 190  
Asp Thr Cys Glu Ala Asp Cys Leu Arg Lys Arg Ala Glu Gln Ser Leu  
195 200 205  
Gln Ala Ala Ile Lys Thr Leu Arg Lys Ser Ile Gly Arg Gln Gln Phe  
210 215 220  
Tyr Val Gln Val Ser Gly Thr Glu Tyr Glu Val Ala Gln Arg Pro Ala  
225 230 235 240  
Lys Ala Leu Glu Gly Gln Gly Ala Cys Gly Ala Gly Gln Val Leu Gln  
245 250 255  
Asp Ser Lys Cys Val Ala Cys Gly Pro Gly Thr His Phe Gly Gly Glu  
260 265 270  
Leu Gly Gln Cys Val Pro Cys Met Pro Gly Thr Tyr Gln Asp Met Glu  
275 280 285  
Gly Gln Leu Ser Cys Thr Pro Cys Pro Ser Ser Asp Gly Leu Gly Leu  
290 295 300  
Pro Gly Ala Arg Asn Val Ser Glu Cys Gly Gly Gln Cys Ser Pro Gly  
305 310 315 320  
Phe Phe Ser Ala Asp Gly Phe Lys Pro Cys Gln Ala Cys Pro Val Gly  
325 330 335

Thr Tyr Gln Pro Glu Pro Gly Arg Thr Gly Cys Phe Pro Cys Gly Gly  
340 345 350  
Gly Leu Leu Thr Lys His Glu Gly Thr Thr Ser Phe Gln Asp Cys Glu  
355 360 365  
Ala Lys Val His Cys Ser Pro Gly His His Tyr Asn Thr Thr Thr His  
370 375 380  
Arg Cys Ile Arg Cys Pro Val Gly Thr Tyr Gln Pro Glu Phe Gly Gln  
385 390 395 400  
Asn His Cys Ile Thr Cys Pro Gly Asn Thr Ser Thr Asp Phe Asp Gly  
405 410 415  
Ser Thr Asn Val Thr His Cys Lys Asn Gln His Cys Gly Gly Glu Leu  
420 425 430  
Gly Asp Tyr Thr Gly Tyr Ile Glu Ser Pro Asn Tyr Pro Gly Asp Tyr  
435 440 445  
Pro Ala Asn Ala Glu Cys Val Trp His Ile Ala Pro Pro Pro Lys Arg  
450 455 460  
Arg Ile Leu Ile Val Val Pro Glu Ile Phe Leu Pro Ile Glu Asp Glu  
465 470 475 480  
Cys Gly Asp Val Leu Val Met Arg Lys Ser Ala Ser Pro Thr Ser Ile  
485 490 495  
Thr Thr Tyr Glu Thr Cys Gln Thr Tyr Glu Arg Pro Ile Ala Phe Thr  
500 505 510  
Ser Arg Ser Arg Lys Leu Trp Ile Gln Phe Lys Ser Asn Glu Gly Asn  
515 520 525  
Ser Gly Lys Gly Phe Gln Val Pro Tyr Val Thr Tyr Asp Glu Asp Tyr  
530 535 540  
Gln Gln Leu Ile Glu Asp Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser  
545 550 555 560  
Glu Asn His Gln Glu Ile Leu Lys Asp Lys Lys Leu Ile Lys Ala Leu

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Glu Val Ser Ala Gln Gly Ser Ser Pro Leu Thr Thr Leu Pro Gln Ile  
 115 120 125  
 Arg Thr Gly Ile Pro Gly Arg Leu Thr Arg Glu Ala Pro Gln Arg Lys  
 130 135 140  
 Ala Gln Gly Ser Asp Leu Pro Gly Thr Lys His Ala Pro Glu Gly Gln  
 145 150 155 160  
 Arg Arg Arg Arg Ala Leu Pro Asp Pro Thr Leu Gln Asn Pro Ala Leu  
 165 170 175  
 Ser Gln Ala Pro Thr Pro Gly Leu Gln Thr Arg Leu Pro Pro Leu Ala  
 180 185 190  
 Ala Leu Pro Ala Pro Thr Leu Ser His Gly Asp Ala Trp Ala Pro Leu  
 195 200 205  
 Ala Leu Val Gly Glu Thr Ala Arg Thr Thr Leu Thr Ala Arg Leu Leu  
 210 215 220  
 Arg Gly Leu Glu Glu Ser  
 225 230

&lt;210&gt; 2986

&lt;211&gt; 733

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2986

Met Ala Ser Ile Ser Glu Pro Val Thr Phe Arg Glu Phe Cys Pro Leu  
 1 5 10 15  
 Tyr Tyr Leu Leu Asn Ala Ile Pro Thr Lys Ile Gln Lys Gly Phe Arg  
 20 25 30  
 Ser Ile Val Val Tyr Leu Thr Ala Leu Asp Thr Asn Gly Asp Tyr Ile

35	40	45
Ala Val Gly Ser Ser Ile Gly Met Leu Tyr Leu Tyr Cys Arg His Leu		
50	55	60
Asn Gln Met Arg Lys Tyr Asn Phe Glu Gly Lys Thr Glu Ser Ile Thr		
65	70	75
Val Val Lys Leu Leu Ser Cys Phe Asp Asp Leu Val Ala Ala Gly Thr		
85	90	95
Ala Ser Gly Arg Val Ala Val Phe Gln Leu Val Ser Ser Leu Pro Gly		
100	105	110
Arg Asn Lys Gln Leu Arg Arg Phe Asp Val Thr Gly Ile His Lys Asn		
115	120	125
Ser Ile Thr Ala Leu Ala Trp Ser Pro Asn Gly Met Lys Leu Phe Ser		
130	135	140
Gly Asp Asp Lys Gly Lys Ile Val Tyr Ser Ser Leu Asp Leu Asp Gln		
145	150	155
Gly Leu Cys Asn Ser Gln Leu Val Leu Glu Glu Pro Ser Ser Ile Val		
165	170	175
Gln Leu Asp Tyr Ser Gln Lys Val Leu Leu Val Ser Thr Leu Gln Arg		
180	185	190
Ser Leu Leu Phe Tyr Thr Glu Glu Lys Ser Val Arg Gln Ile Gly Thr		
195	200	205
Gln Pro Arg Lys Ser Thr Gly Lys Phe Gly Ala Cys Phe Ile Pro Gly		
210	215	220
Leu Cys Lys Gln Ser Asp Leu Thr Leu Tyr Ala Ser Arg Pro Gly Leu		
225	230	235
Arg Leu Trp Lys Ala Asp Val His Gly Thr Val Gln Ala Thr Phe Ile		
245	250	255
Leu Lys Asp Ala Phe Ala Gly Gly Val Lys Pro Phe Glu Leu His Pro		
260	265	270

Arg Leu Glu Ser Pro Asn Ser Gly Ser Cys Ser Leu Pro Glu Arg His  
275 280 285  
Leu Gly Leu Val Ser Cys Phe Phe Gln Glu Gly Trp Val Leu Ser Trp  
290 295 300  
Asn Glu Tyr Ser Ile Tyr Leu Leu Asp Thr Val Asn Gln Ala Thr Ile  
305 310 315 320  
Ala Gly Leu Glu Gly Ser Gly Asp Ile Val Ser Val Ser Cys Thr Glu  
325 330 335  
Asn Glu Ile Phe Phe Leu Lys Gly Asp Arg Asn Ile Ile Arg Ile Ser  
340 345 350  
Ser Arg Pro Glu Gly Leu Thr Ser Thr Val Arg Asp Gly Leu Glu Met  
355 360 365  
Ser Gly Cys Ser Glu Arg Val His Val Gln Gln Ala Glu Lys Leu Pro  
370 375 380  
Gly Ala Thr Val Ser Glu Thr Arg Leu Arg Gly Ser Ser Met Ala Ser  
385 390 395 400  
Ser Val Ala Ser Glu Pro Arg Ser Arg Ser Ser Ser Leu Asn Ser Thr  
405 410 415  
Asp Ser Gly Ser Gly Leu Leu Pro Pro Gly Leu Gln Ala Thr Pro Glu  
420 425 430  
Leu Gly Lys Gly Ser Gln Pro Leu Ser Gln Arg Phe Asn Ala Ile Ser  
435 440 445  
Ser Glu Asp Phe Asp Gln Glu Leu Ala Val Lys Pro Ile Lys Val Lys  
450 455 460  
Arg Lys Lys Lys Lys Lys Lys Thr Glu Gly Gly Ser Arg Ser Thr Cys  
465 470 475 480  
His Ser Ser Leu Glu Ser Thr Pro Cys Ser Glu Phe Pro Gly Asp Ser  
485 490 495  
Pro Gln Ser Leu Asn Thr Asp Leu Leu Ser Met Thr Ser Ser Val Leu

500 505 510  
Gly Ser Ser Val Asp Gln Leu Ser Ala Glu Ser Pro Asp Gln Glu Ser  
515 520 525  
Ser Phe Asn Gly Glu Val Asn Gly Val Pro Gln Glu Asn Thr Asp Pro  
530 535 540  
Glu Thr Phe Asn Val Leu Glu Val Ser Gly Ser Met Pro Asp Ser Leu  
545 550 555 560  
Ala Glu Glu Asp Asp Ile Arg Thr Glu Met Pro His Cys His His Ala  
565 570 575  
His Gly Arg Glu Leu Leu Asn Gly Ala Arg Glu Asp Val Gly Gly Ser  
580 585 590  
Asp Val Thr Gly Leu Gly Asp Glu Pro Cys Pro Ala Asp Asp Gly Pro  
595 600 605  
Asn Ser Thr Pro Gln His Thr Thr His Leu Thr Ser His His Ser Thr  
610 615 620  
Pro His His Thr Thr Pro His Cys Thr Ile Pro His His Ile Ser Pro  
625 630 635 640  
His His Ser Thr Pro His His Thr Thr His His Thr Pro His Arg Thr  
645 650 655  
Ala Pro His Arg Thr Ala Pro Tyr Leu Ala Thr Ser His His Thr Thr  
660 665 670  
Pro His His Thr Ser Leu Pro Thr His Gly Ala Gly Cys Pro Pro Pro  
675 680 685  
Gly Glu His Thr Ser Ala Glu Thr Val Lys Pro Asp Gly Cys Lys Trp  
690 695 700  
Asn Leu Asp Val Cys Thr Cys Val Pro Gly Arg Asp Gly Thr Gly Gly  
705 710 715 720  
Cys Met Gly Arg Gly Gly Ala Glu Gln Gly Ser Leu Thr  
725 730

&lt;210&gt; 2987

&lt;211&gt; 1167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2987

Met Val Ile Val Ile Leu Phe Pro Ala Glu Cys Gly Asn Ser Val Thr

1 5 10 15

Ala Thr Gln Gly Thr Leu Leu Ser Pro Asn Phe Pro Val Asn Tyr Asn

20 25 30

Asn Asn His Glu Cys Ile Tyr Ser Ile Gln Thr Gln Pro Gly Lys Gly

35 40 45

Ile Gln Leu Lys Ala Arg Ala Phe Glu Leu Ser Glu Gly Asp Val Leu

50 55 60

Lys Val Tyr Asp Gly Asn Asn Asn Ser Ala Arg Leu Leu Gly Val Phe

65 70 75 80

Ser His Ser Glu Met Met Gly Glu Thr Leu Asn Ser Thr Ser Ser Ser

85 90 95

Leu Trp Leu Asp Phe Ile Thr Asp Ala Glu Asn Thr Ser Lys Gly Phe

100 105 110

Glu Leu His Phe Ser Ser Phe Glu Leu Ile Lys Cys Glu Asp Pro Gly

115 120 125

Thr Pro Lys Phe Gly Tyr Lys Val His Asp Glu Gly His Phe Ala Gly

130 135 140

Ser Ser Val Ser Phe Ser Cys Asp Pro Gly Tyr Ser Leu Arg Gly Ser

145 150 155 160

Glu Glu Leu Leu Cys Leu Ser Gly Glu Arg Arg Thr Trp Asp Arg Pro



165 170 175  
Leu Pro Thr Cys Val Ala Glu Cys Gly Gly Thr Val Arg Gly Glu Val  
180 185 190  
Ser Gly Gln Val Leu Ser Pro Gly Tyr Pro Ala Pro Tyr Glu His Asn  
195 200 205  
Leu Asn Cys Ile Trp Thr Ile Glu Ala Glu Ala Gly Cys Thr Ile Gly  
210 215 220  
Leu His Phe Leu Val Phe Asp Thr Glu Glu Val His Asp Val Leu Arg  
225 230 235 240  
Ile Trp Asp Gly Pro Val Glu Ser Gly Val Leu Leu Lys Glu Leu Ser  
245 250 255  
Gly Pro Ala Leu Pro Lys Asp Leu His Ser Thr Phe Asn Ser Val Val  
260 265 270  
Leu Gln Phe Ser Thr Asp Phe Phe Thr Ser Lys Gln Gly Phe Ala Ile  
275 280 285  
Gln Phe Ser Val Ser Thr Ala Thr Ser Cys Asn Asp Pro Gly Ile Pro  
290 295 300  
Gln Asn Gly Ser Arg Ser Gly Asp Ser Trp Glu Ala Gly Asp Ser Thr  
305 310 315 320  
Val Phe Gln Cys Asp Pro Gly Tyr Ala Leu Gln Gly Ser Ala Glu Ile  
325 330 335  
Ser Cys Val Lys Ile Glu Asn Arg Phe Phe Trp Gln Pro Ser Pro Pro  
340 345 350  
Thr Cys Ile Ala Pro Cys Gly Gly Asp Leu Thr Gly Pro Ser Gly Val  
355 360 365  
Ile Leu Ser Pro Asn Tyr Pro Glu Pro Tyr Pro Pro Gly Lys Glu Cys  
370 375 380  
Asp Trp Lys Val Thr Val Ser Pro Asp Tyr Val Ile Ala Leu Val Phe  
385 390 395 400

Asn Ile Phe Asn Leu Glu Pro Gly Tyr Asp Phe Leu His Ile Tyr Asp  
 405 410 415  
 Gly Arg Asp Ser Leu Ser Pro Leu Ile Gly Ser Phe Tyr Gly Ser Gln  
 420 425 430  
 Leu Pro Gly Arg Ile Glu Ser Ser Ser Asn Ser Leu Phe Leu Ala Phe  
 435 440 445  
 Arg Ser Asp Ala Ser Val Ser Asn Ala Gly Phe Val Ile Asp Tyr Thr  
 450 455 460  
 Glu Asn Pro Arg Glu Ser Cys Phe Asp Pro Gly Ser Ile Lys Asn Gly  
 465 470 475 480  
 Thr Arg Val Gly Ser Asp Leu Lys Leu Gly Ser Ser Val Thr Tyr Tyr  
 485 490 495  
 Cys His Gly Gly Tyr Glu Val Glu Gly Thr Ser Thr Leu Ser Cys Ile  
 500 505 510  
 Leu Gly Pro Asp Gly Lys Pro Val Trp Asn Asn Pro Arg Pro Val Cys  
 515 520 525  
 Thr Ala Pro Cys Gly Gly Gln Tyr Val Gly Ser Asp Gly Val Val Leu  
 530 535 540  
 Ser Pro Asn Tyr Pro Gln Asn Tyr Thr Ser Gly Gln Ile Cys Leu Tyr  
 545 550 555 560  
 Phe Val Thr Val Pro Lys Asp Tyr Val Val Phe Gly Gln Phe Ala Phe  
 565 570 575  
 Phe His Thr Ala Leu Asn Asp Val Val Glu Val His Asp Gly His Ser  
 580 585 590  
 Gln His Ser Arg Leu Leu Ser Ser Leu Ser Gly Ser His Thr Gly Gly  
 595 600 605  
 Ser Leu Pro Leu Ala Thr Ser Asn Gln Val Leu Ile Lys Phe Ser Ala  
 610 615 620  
 Lys Gly Leu Ala Pro Ala Arg Gly Phe His Phe Val Tyr Gln Ala Val

625                      630                      635                      640  
Pro Arg Thr Ser Ala Thr Gln Cys Ser Ser Val Pro Glu Pro Arg Tyr  
                                645                      650                      655  
Gly Lys Arg Leu Gly Ser Asp Phe Ser Val Gly Ala Ile Val Arg Phe  
                                660                      665                      670  
Glu Cys Asn Ser Gly Tyr Ala Leu Gln Gly Ser Pro Glu Ile Glu Cys  
                                675                      680                      685  
Leu Pro Val Pro Gly Ala Leu Ala Gln Trp Asn Val Ser Ala Pro Thr  
                                690                      695                      700  
Cys Val Val Pro Cys Gly Gly Asn Leu Thr Glu Arg Arg Gly Thr Ile  
705                      710                      715                      720  
Leu Ser Pro Gly Phe Pro Glu Pro Tyr Leu Asn Ser Leu Asn Cys Val  
                                725                      730                      735  
Trp Lys Ile Val Val Pro Glu Gly Ala Gly Ile Gln Ile Gln Val Val  
                                740                      745                      750  
Ser Phe Val Thr Glu Gln Asn Trp Asp Ser Leu Glu Val Phe Asp Gly  
                                755                      760                      765  
Ala Asp Asn Thr Val Thr Met Leu Gly Ser Phe Ser Gly Thr Thr Val  
                                770                      775                      780  
Pro Ala Leu Leu Asn Ser Thr Ser Asn Gln Leu Tyr Leu His Phe Tyr  
785                      790                      795                      800  
Ser Asp Ile Ser Val Ser Ala Ala Gly Phe His Leu Glu Tyr Lys Thr  
                                805                      810                      815  
Val Gly Leu Ser Ser Cys Pro Glu Pro Ala Val Pro Ser Asn Gly Val  
                                820                      825                      830  
Lys Thr Gly Glu Arg Tyr Leu Val Asn Asp Val Val Ser Phe Gln Cys  
                                835                      840                      845  
Glu Pro Gly Tyr Ala Leu Gln Gly His Ala His Ile Ser Cys Met Pro  
                                850                      855                      860

Gly Thr Val Arg Arg Trp Asn Tyr Pro Pro Pro Leu Cys Ile Ala Gln  
865 870 875 880  
Cys Gly Gly Thr Val Glu Glu Met Glu Gly Val Ile Leu Ser Pro Gly  
885 890 895  
Phe Pro Gly Asn Tyr Pro Ser Asn Met Asp Cys Ser Trp Lys Ile Ala  
900 905 910  
Leu Pro Val Gly Phe Gly Ala His Ile Gln Phe Leu Asn Phe Ser Thr  
915 920 925  
Glu Pro Asn His Asp Tyr Ile Glu Ile Arg Asn Gly Pro Tyr Glu Thr  
930 935 940  
Ser Arg Met Met Gly Arg Phe Ser Gly Ser Glu Leu Pro Ser Ser Leu  
945 950 955 960  
Leu Ser Thr Ser His Glu Thr Thr Val Tyr Phe His Ser Asp His Ser  
965 970 975  
Gln Asn Arg Pro Gly Phe Lys Leu Glu Tyr Gln Ala Tyr Glu Leu Gln  
980 985 990  
Glu Cys Pro Asp Pro Glu Pro Phe Ala Asn Gly Ile Val Arg Gly Ala  
995 1000 1005  
Gly Tyr Asn Val Gly Gln Ser Val Thr Phe Glu Cys Leu Pro Gly Tyr  
1010 1015 1020  
Gln Leu Thr Gly His Pro Val Leu Thr Cys Gln His Gly Thr Asn Arg  
1025 1030 1035 1040  
Asn Trp Asp His Pro Leu Pro Lys Cys Glu Val Pro Cys Gly Gly Asn  
1045 1050 1055  
Ile Thr Ser Ser Asn Gly Thr Val Tyr Ser Pro Gly Phe Pro Ser Pro  
1060 1065 1070  
Tyr Ser Ser Ser Gln Asp Cys Val Trp Leu Ile Thr Val Pro Ile Gly  
1075 1080 1085  
His Gly Val Arg Leu Asn Leu Ser Leu Leu Gln Thr Glu Pro Ser Gly

1090	1095	1100
Asp Phe Ile Thr Ile Trp Asp Gly Pro Gln Gln Thr Ala Pro Arg Leu		
1105	1110	1115
Gly Val Phe Thr Arg Ser Met Ala Lys Lys Thr Val Gln Ser Ser Ser		
1125	1130	1135
Asn Gln Val Leu Leu Lys Phe His Arg Asp Ala Ala Thr Gly Gly Ile		
1140	1145	1150
Phe Ala Ile Ala Phe Ser Gly His Leu Ala Ala Val Cys Thr Leu		
1155	1160	1165

&lt;210&gt; 2988

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2988

Met Glu Ile Cys His Phe Gly Gln Val Leu Leu Thr Val Pro Val Thr
1 5 10 15
Ser Pro Arg Arg Arg Ala Thr Thr Ser Arg Pro His Asp Pro Ser Asp
20 25 30
Cys His His Thr Gly Pro Arg Arg Arg Ile Ser Met Ala Phe Leu Thr
35 40 45
Leu Cys Leu Gln Arg Ile Ser Phe Phe Ile Val Phe Phe Phe Phe
50 55 60
Tyr Phe Leu Phe Ser Phe Phe Phe Glu Thr Glu Ser Leu Ser Val Ala
65 70 75 80
Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu Gln Pro Arg Pro
85 90 95

Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp  
                   100                                  105                                  110  
 Tyr Gly His Thr Pro Gln Arg Ser Ala Asn Phe Cys Ile Phe Arg Lys  
                   115                                  120                                  125  
 Asp Arg Val Leu Pro Cys Trp Pro Gly Trp Ser Arg Ser Ser Glu Leu  
                   130                                  135                                  140  
 Val Ile His Leu Pro Arg Pro Pro Lys Cys Trp Asp Tyr Arg Arg Glu  
                   145                                  150                                  155                                  160  
 Pro Pro His Pro Ala  
   165

&lt;210&gt; 2989

&lt;211&gt; 382

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2989

Met Leu Asp Gly Leu Lys Met Glu Glu Asn Phe Gln Ser Ala Ile Asp  
           1                                  5                                  10                                  15  
 Thr Ser Ala Ser Phe Ser Ser Leu Leu Gly Arg Ala Val Ser Pro Lys  
                                   20                                  25                                  30  
 Ser Val Cys Glu Gly Cys Gln Arg Val Ile Leu Asp Arg Phe Leu Leu  
                                   35                                  40                                  45  
 Arg Leu Asn Asp Ser Phe Trp His Glu Gln Cys Val Gln Cys Ala Ser  
                                   50                                  55                                  60  
 Cys Lys Glu Pro Leu Glu Thr Thr Cys Phe Tyr Arg Asp Lys Lys Leu  
                                   65                                  70                                  75                                  80  
 Tyr Cys Lys Tyr Asp Tyr Glu Lys Leu Phe Ala Val Lys Cys Gly Gly

	85		90		95
Cys Phe Glu Ala Ile Ala Pro Asn Glu Phe Val Met Arg Ala Gln Lys					
	100		105		110
Ser Val Tyr His Leu Ser Cys Phe Cys Cys Cys Val Cys Glu Arg Gln					
	115		120		125
Leu Gln Lys Gly Asp Glu Phe Val Leu Lys Glu Gly Gln Leu Leu Cys					
	130		135		140
Lys Gly Asp Tyr Glu Lys Glu Arg Glu Leu Leu Ser Leu Val Ser Pro					
	145		150		155
					160
Ala Ala Ser Asp Ser Gly Lys Ser Asp Asp Glu Glu Ser Leu Cys Lys					
	165		170		175
Ser Ala His Gly Ala Gly Lys Gly Thr Ala Glu Glu Gly Lys Asp His					
	180		185		190
Lys Arg Pro Lys Arg Pro Arg Thr Ile Leu Thr Thr Gln Gln Arg Arg					
	195		200		205
Ala Phe Lys Ala Ser Phe Glu Val Ser Ser Lys Pro Cys Arg Lys Val					
	210		215		220
Arg Glu Thr Leu Ala Ala Glu Thr Gly Leu Ser Val Arg Val Val Gln					
	225		230		235
					240
Val Trp Phe Gln Asn Gln Arg Ala Lys Met Lys Lys Leu Ala Arg Arg					
	245		250		255
Gln Gln Gln Gln Gln Gln Asp Gln Gln Asn Thr Gln Arg Leu Ser Ser					
	260		265		270
Ala Gln Thr Asn Gly Gly Gly Ser Ala Gly Met Glu Gly Ile Met Asn					
	275		280		285
Pro Tyr Thr Ala Leu Pro Thr Pro Gln Gln Leu Leu Ala Ile Glu Gln					
	290		295		300
Ser Val Tyr Ser Ser Asp Pro Phe Arg Gln Gly Leu Thr Pro Pro Gln					
	305		310		315
					320

<210> 2990  
<211> 159  
<212> PRT  
<213> Homo sapiens

出証特 2 0 0 4 - 3 0 5 9 6 6 1



100 105 110  
 Ser Thr Arg Gly Gly Arg Arg Ser Gly His Gly Ala Val Arg Ser Trp  
 115 120 125  
 Gly Pro Trp Lys Val Val Ala Glu Gln Pro Val Gly Gly Thr Asp Pro  
 130 135 140  
 Pro Ala His Gly Gly Arg Gly Arg Pro Ser Pro Asn Glu Asn Thr  
 145 150 155

<210> 2991

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2991

Met Glu His Glu Gln Thr Asp Ile Thr Ser Arg Asp Ser Arg Gly Asn  
 1 5 10 15  
 Asn Ile Leu His Ala Leu Val Thr Val Ala Glu Asp Phe Lys Thr Gln  
 20 25 30  
 Asn Asp Phe Val Lys Arg Met Tyr Asp Met Ile Leu Leu Arg Ser Gly  
 35 40 45  
 Asn Trp Glu Leu Glu Thr Thr Arg Asn Asn Asp Gly Leu Thr Pro Leu  
 50 55 60  
 Gln Leu Ala Ala Lys Met Gly Lys Ala Glu Ile Leu Lys Tyr Ile Leu  
 65 70 75 80  
 Ser Arg Glu Ile Lys Glu Lys Arg Leu Arg Ser Leu Ser Arg Lys Phe  
 85 90 95  
 Thr Asp Trp Ala Tyr Gly Pro Val Ser Ser Ser Leu Tyr Asp Leu Thr  
 100 105 110

Asn Val Asp Thr Thr Thr Asp Asn Ser Val Leu Glu Ile Thr Val Tyr  
115 120 125

Asn Thr Asn Ile Asp Asn Arg His Glu Met Leu Thr Leu Glu Pro Leu  
130 135 140

His Thr Leu Leu His Met Lys Trp Lys Lys Phe Ala Lys His Met Phe  
145 150 155 160

Phe Leu Ser Phe Cys Phe Tyr Phe Phe Tyr Asn Ile Thr Leu Thr Leu  
165 170 175

Val Ser Tyr Tyr Arg Pro Arg Glu Glu Glu Ala Ile Pro His Pro Leu  
180 185 190

Ala Leu Thr His Lys Met Gly Trp Leu Gln Leu Leu Gly Arg Met Phe  
195 200 205

Val Leu Ile Trp Ala Met Cys Ile Ser Val Lys Glu Gly Ile Ala Ile  
210 215 220

Phe Leu Leu Arg Pro Ser Asp Leu Gln Ser Ile Leu Ser Asp Ala Trp  
225 230 235 240

Phe His Phe Val Phe Phe Ile Gln Ala Val Leu Val Ile Leu Ser Val  
245 250 255

Phe Leu Tyr Leu Phe Ala Tyr Lys Glu Tyr Leu Ala Cys Leu Val Leu  
260 265 270

Ala Met Ala Leu Gly Trp Ala Asn Met Leu Tyr Tyr Thr Arg Gly Phe  
275 280 285

Gln Ser Met Gly Met Tyr Ser Val Met Ile Gln Lys Val Ile Leu His  
290 295 300

Asp Val Leu Lys Phe Leu Phe Val Tyr Ile Val Phe Leu Leu Gly Phe  
305 310 315 320

Gly Val Ala Leu Ala Ser Leu Ile Glu Lys Cys Pro Lys Asp Asn Lys  
325 330 335

Asp Cys Ser Ser Tyr Gly Ser Phe Ser Asp Ala Val Leu Glu Leu Phe

340 345 350  
Lys Leu Thr Ile Gly Leu Gly Asp Leu Asn Ile Gln Gln Asn Ser Lys  
355 360 365  
Tyr Pro Ile Leu Phe Leu Phe Leu Leu Ile Thr Tyr Val Ile Leu Thr  
370 375 380  
Phe Val Leu Leu Leu Asn Met Leu Ile Ala Leu Met Gly Glu Thr Val  
385 390 395 400  
Glu Asn Val Ser Lys Glu Ser Glu Arg Ile Trp Arg Leu Gln Arg Ala  
405 410 415  
Arg Thr Ile Leu Glu Phe Glu Lys Met Leu Pro Glu Trp Leu Arg Ser  
420 425 430  
Arg Phe Arg Met Gly Glu Leu Cys Lys Val Ala Glu Asp Asp Phe Arg  
435 440 445  
Leu Cys Leu Arg Ile Asn Glu Val Lys Trp Thr Glu Trp Lys Thr His  
450 455 460  
Val Ser Phe Leu Asn Glu Asp Pro Gly Pro Val Arg Arg Thr Asp Phe  
465 470 475 480  
Asn Lys Ile Gln Asp Ser Ser Arg Asn Asn Ser Lys Thr Thr Leu Asn  
485 490 495  
Ala Phe Glu Glu Val Glu Glu Phe Pro Glu Thr Ser Val  
500 505

&lt;210&gt; 2992

&lt;211&gt; 639

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2992

Met Cys Gln Glu Gln Val Asp Pro Asp Ser Leu Lys Asn Val Ile Ala  
 1 5 10 15  
 Arg Ala Ile Ser Lys Leu Pro Ile Val His Phe Cys Ser Ser Lys Pro  
 20 25 30  
 Arg Val Glu Tyr Ser Thr Lys Ile Val Glu Val Phe Cys Gly Lys Glu  
 35 40 45  
 Leu Tyr Gly Tyr Leu Cys Val Ile Lys Val Lys Ala Phe Cys Cys Val  
 50 55 60  
 Val Phe Ser Glu Ala Pro Lys Ser Trp Met Val Arg Glu Lys Tyr Ile  
 65 70 75 80  
 Arg Pro Leu Thr Thr Glu Glu Trp Val Glu Lys Met Met Asp Ala Asp  
 85 90 95  
 Pro Glu Phe Pro Pro Asp Phe Ala Glu Ala Phe Glu Ser Gln Leu Ser  
 100 105 110  
 Leu Ser Asp Ser Pro Ser Leu Cys Arg Pro Val Tyr Ser Lys Lys Gly  
 115 120 125  
 Leu Glu His Lys Ala Asp Leu Gln Gln His Leu Phe Pro Val Pro Pro  
 130 135 140  
 Gly His Leu Glu Cys Thr Pro Glu Ser Leu Trp Lys Glu Leu Ser Leu  
 145 150 155 160  
 Gln His Glu Gly Leu Lys Glu Leu Ile His Lys Gln Met Arg Pro Phe  
 165 170 175  
 Ser Gln Gly Ile Val Ile Leu Ser Arg Ser Trp Ala Val Asp Leu Asn  
 180 185 190  
 Leu Gln Glu Lys Pro Gly Val Ile Cys Asp Ala Leu Leu Ile Ala Gln  
 195 200 205  
 Asn Ser Thr Pro Ile Leu Tyr Thr Ile Leu Arg Glu Gln Asp Ala Glu  
 210 215 220  
 Gly Gln Asp Tyr Cys Thr Arg Thr Ala Phe Thr Leu Lys Gln Lys Leu

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Pro Arg Glu Glu Leu Thr Arg Val Val Arg Asn Ala Asp Glu Ile Ala  
465 470 475 480  
Glu Tyr Ile Gln Gln Glu Met Gln Leu Ile Ile Glu Asn Pro Pro Ile  
485 490 495  
Asn Ile Pro His Gly Tyr Leu Ala Ile Leu Ser Glu Ala Lys Trp Val  
500 505 510  
Pro Gly Val Pro Gly Asn Thr Lys Ile Ile Lys Asn Phe Thr Leu Glu  
515 520 525  
Gln Ile Val Thr Tyr Val Ala Asp Thr Cys Arg Cys Phe Phe Glu Arg  
530 535 540  
Gly Tyr Ser Pro Lys Asp Val Ala Val Leu Val Ser Thr Val Thr Glu  
545 550 555 560  
Val Glu Gln Tyr Gln Ser Lys Leu Leu Lys Ala Met Arg Lys Lys Met  
565 570 575  
Val Val Gln Leu Ser Asp Ala Cys Asp Met Leu Gly Val His Ile Val  
580 585 590  
Leu Asp Ser Val Arg Arg Phe Ser Gly Leu Glu Arg Ser Ile Val Phe  
595 600 605  
Gly Ile His Pro Arg Thr Ala Asp Pro Ala Ile Leu Pro Asn Ile Leu  
610 615 620  
Ile Cys Leu Ala Ser Arg Ala Lys Gln His Leu Tyr Ile Phe Leu  
625 630 635

&lt;210&gt; 2993

&lt;211&gt; 870

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2993

Met Leu Ser Met Leu Met His Ser Ser Ser Lys Glu Val Phe Gln Ala  
 1 5 10 15  
 Ser Ala Asn Ala Leu Ser Thr Leu Leu Glu Gln Asn Val Asn Phe Arg  
 20 25 30  
 Lys Ile Leu Leu Ser Lys Gly Ile His Leu Asn Val Leu Glu Leu Met  
 35 40 45  
 Gln Lys His Ile His Ser Pro Glu Val Ala Glu Ser Gly Cys Lys Met  
 50 55 60  
 Leu Asn His Leu Phe Glu Gly Ser Asn Thr Ser Leu Asp Ile Met Ala  
 65 70 75 80  
 Ala Val Val Pro Lys Ile Leu Thr Val Met Lys Arg His Glu Thr Ser  
 85 90 95  
 Leu Pro Val Gln Leu Glu Ala Leu Arg Ala Ile Leu His Phe Ile Val  
 100 105 110  
 Pro Gly Met Pro Glu Glu Ser Arg Glu Asp Thr Glu Phe His His Lys  
 115 120 125  
 Leu Asn Met Val Lys Lys Gln Cys Phe Lys Asn Asp Ile His Lys Leu  
 130 135 140  
 Val Leu Ala Ala Leu Asn Arg Phe Ile Gly Asn Pro Gly Ile Gln Lys  
 145 150 155 160  
 Cys Gly Leu Lys Val Ile Ser Ser Ile Val His Phe Pro Asp Ala Leu  
 165 170 175  
 Glu Met Leu Ser Leu Glu Gly Ala Met Asp Ser Val Leu His Thr Leu  
 180 185 190  
 Gln Met Tyr Pro Asp Asp Gln Glu Ile Gln Cys Leu Gly Leu Ser Leu  
 195 200 205  
 Ile Gly Tyr Leu Ile Thr Lys Lys Asn Val Phe Ile Gly Thr Gly His  
 210 215 220

Leu Leu Ala Lys Ile Leu Val Ser Ser Leu Tyr Arg Phe Lys Asp Val  
225 230 235 240  
Ala Glu Ile Gln Thr Lys Gly Phe Gln Thr Ile Leu Ala Ile Leu Lys  
245 250 255  
Leu Ser Ala Ser Phe Ser Lys Leu Leu Val His His Ser Phe Asp Leu  
260 265 270  
Val Ile Phe His Gln Met Ser Ser Asn Ile Met Glu Gln Lys Asp Gln  
275 280 285  
Gln Phe Leu Asn Leu Cys Cys Lys Cys Phe Ala Lys Val Ala Met Asp  
290 295 300  
Asp Tyr Leu Lys Asn Val Met Leu Glu Arg Ala Cys Asp Gln Asn Asn  
305 310 315 320  
Ser Ile Met Val Glu Cys Leu Leu Leu Leu Gly Ala Asp Ala Asn Gln  
325 330 335  
Ala Lys Glu Gly Ser Ser Leu Ile Cys Gln Val Cys Glu Lys Glu Ser  
340 345 350  
Ser Pro Lys Leu Val Glu Leu Leu Leu Asn Ser Gly Ser Arg Glu Gln  
355 360 365  
Asp Val Arg Lys Ala Leu Thr Ile Ser Ile Gly Lys Gly Asp Ser Gln  
370 375 380  
Ile Ile Ser Leu Leu Leu Arg Arg Leu Ala Leu Asp Val Ala Asn Asn  
385 390 395 400  
Ser Ile Cys Leu Gly Gly Phe Cys Ile Gly Lys Val Glu Pro Ser Trp  
405 410 415  
Leu Gly Pro Leu Phe Pro Asp Lys Thr Ser Asn Leu Arg Lys Gln Thr  
420 425 430  
Asn Ile Ala Ser Thr Leu Ala Arg Met Val Ile Arg Tyr Gln Met Lys  
435 440 445  
Ser Ala Val Glu Glu Gly Thr Ala Ser Gly Ser Asp Gly Asn Phe Ser



450 455 460  
Glu Asp Val Leu Ser Lys Phe Asp Glu Trp Thr Phe Ile Pro Asp Ser  
465 470 475 480  
Ser Met Asp Ser Val Phe Ala Gln Ser Asp Asp Leu Asp Ser Glu Gly  
485 490 495  
Ser Glu Gly Ser Phe Leu Val Lys Lys Lys Ser Asn Ser Ile Ser Val  
500 505 510  
Gly Glu Phe Tyr Arg Asp Ala Val Leu Gln Arg Cys Ser Pro Asn Leu  
515 520 525  
Gln Arg His Ser Asn Ser Leu Gly Pro Ile Phe Asp His Glu Asp Leu  
530 535 540  
Leu Lys Arg Lys Arg Lys Ile Leu Ser Ser Asp Asp Ser Leu Arg Ser  
545 550 555 560  
Ser Lys Leu Gln Ser His Met Arg His Ser Asp Ser Ile Ser Ser Leu  
565 570 575  
Ala Ser Glu Arg Glu Tyr Ile Thr Ser Leu Asp Leu Ser Ala Asn Glu  
580 585 590  
Leu Arg Asp Ile Asp Ala Leu Ser Gln Lys Cys Cys Ile Ser Val His  
595 600 605  
Leu Glu His Leu Glu Lys Leu Glu Leu His Gln Asn Ala Leu Thr Ser  
610 615 620  
Phe Pro Gln Gln Leu Cys Glu Thr Leu Lys Ser Leu Thr His Leu Asp  
625 630 635 640  
Leu His Ser Asn Lys Phe Thr Ser Phe Pro Ser Tyr Leu Leu Lys Met  
645 650 655  
Ser Cys Ile Ala Asn Leu Asp Val Ser Arg Asn Asp Ile Gly Pro Ser  
660 665 670  
Val Val Leu Asp Pro Thr Val Lys Cys Pro Thr Leu Lys Gln Phe Asn  
675 680 685

Leu Ser Tyr Asn Gln Leu Ser Phe Val Pro Glu Asn Leu Thr Asp Val  
690 695 700  
Val Glu Lys Leu Glu Gln Leu Ile Leu Glu Gly Asn Lys Ile Ser Gly  
705 710 715 720  
Ile Cys Ser Pro Leu Arg Leu Lys Glu Leu Lys Ile Leu Asn Leu Ser  
725 730 735  
Lys Asn His Ile Ser Ser Leu Ser Glu Asn Phe Leu Glu Ala Cys Pro  
740 745 750  
Lys Val Glu Ser Phe Ser Ala Arg Met Asn Phe Leu Ala Ala Met Pro  
755 760 765  
Phe Leu Pro Pro Ser Met Thr Ile Leu Lys Leu Ser Gln Asn Lys Phe  
770 775 780  
Ser Cys Ile Pro Glu Ala Ile Leu Asn Leu Pro His Leu Arg Ser Leu  
785 790 795 800  
Asp Met Ser Ser Asn Asp Ile Gln Tyr Leu Pro Gly Pro Ala His Trp  
805 810 815  
Lys Ser Leu Asn Leu Arg Glu Leu Leu Phe Ser His Asn Gln Ile Ser  
820 825 830  
Ile Leu Asp Leu Ser Glu Lys Ala Tyr Leu Trp Ser Arg Val Glu Lys  
835 840 845  
Leu His Leu Ser His Asn Lys Leu Lys Glu Val Arg Arg Leu Leu Pro  
850 855 860  
Leu Lys Lys Tyr Thr Leu  
865 870

&lt;210&gt; 2994

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2994

Met Lys Gly Thr Gln Arg Trp Ser Val Thr Arg Pro Gly Asp Arg Pro  
 1 5 10 15  
 Asp Met Trp Cys Pro His Pro Glu Gly Arg Pro Trp Arg Asp Asp Pro  
 20 25 30  
 Pro Leu Pro Pro Pro Pro Ile Arg Leu Trp Thr Pro Ser Ser Leu Pro  
 35 40 45  
 Pro Ser Thr Leu Pro Asp Pro Pro Lys Ser Pro Gly Ser Ser Leu Pro  
 50 55 60  
 Gln Gly Thr Arg Ser Thr Ala Pro Ser Ile Pro Asn Gly Pro Asp Ser  
 65 70 75 80  
 Gln Arg Gly Val Arg Lys Glu Lys Ala Ile Ser His Arg Leu Ile Leu  
 85 90 95  
 Leu Ala Pro Gly Ser Ser Thr Gly Arg Arg Val Gly Leu Cys Arg His  
 100 105 110  
 Asp Gly Ser Val Val Arg Glu Gly Pro Pro Pro Met Cys Leu Gly Arg  
 115 120 125  
 Gly Pro Pro Lys Pro Leu Arg Gly Ser Ala Lys Gly Leu Glu Ser Ala  
 130 135 140  
 Pro Ala His Thr Gly Pro Cys Ser Leu Val Ala Ile Val Ser Ala Thr  
 145 150 155 160  
 Ser Thr Phe Arg Ser Leu Pro Arg Ala Cys Pro Arg Ser Leu Ser Pro  
 165 170 175  
 Pro Trp His Ala Pro Leu Cys Pro His Thr Leu Cys Val Ser Gly Asp  
 180 185 190  
 Ser Gly Asp Ser Ser Gly Val Thr  
 195 200

&lt;210&gt; 2995

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2995

Met Glu Ile Ser Cys Thr Ser Gln Gly Phe Phe Phe Leu Lys Glu His

1 5 10 15

Ser Ser Gly Val Ser Ser Val Lys Ala Ala Gln Met Pro Gly Arg Thr

20 25 30

Leu Tyr Arg Ser Leu Cys Ser Cys Val Phe Pro Leu His Ser Pro Thr

35 40 45

Arg Pro Pro Ser Pro Ala Ser Ala Pro Lys Gly Phe Leu Leu Leu Ser

50 55 60

Pro Thr Ser Ser Asn Ala Ser Lys Leu Met Pro Tyr Tyr Leu Phe His

65 70 75 80

Arg Ser Arg Gly Val Asp Asn Ser Lys Ile Ser Val Leu Ile Leu Leu

85 90 95

Gly Cys Glu Leu Glu Gln Thr Lys Lys Lys Lys Leu Gly Pro Ala Thr

100 105 110

Ala Leu Gly Asn Ser Gly Arg Val Glu

115 120

&lt;210&gt; 2996

&lt;211&gt; 121

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2996

Met Ala Ala Arg Leu Leu Gly Arg Val Asn Pro Ala Asn Thr Val Arg  
1 5 10 15  
Ala Gly Leu Arg Leu Gly Cys Cys Ala Ala Phe Pro Gly Leu Arg Leu  
20 25 30  
Gly Phe Pro His Pro Val Trp Arg Phe Ala Thr Pro Gly Ile Trp Arg  
35 40 45  
Arg Ser Arg Arg Pro Arg Gly Glu Val Arg Pro Glu Pro Gln Asn Pro  
50 55 60  
Asp Thr His Gly Leu Pro Arg Arg Ala Pro Ala Phe Leu Ser Leu Gly  
65 70 75 80  
Asp Trp Phe Leu Arg Gln Pro Trp Asn His Cys Asp Gly Lys Ser His  
85 90 95  
Ser Arg Leu Ala Gln Glu His Trp Leu Gly Gly Leu Ala Leu Arg Ser  
100 105 110  
Trp Gln Ser Gly Cys Val Pro Phe Lys  
115 120

<210> 2997

<211> 1113

<212> PRT

<213> Homo sapiens

<400> 2997

Met Thr Gln Leu Glu Met Glu Ile Gln Glu Ala Phe Leu Arg Phe Met  
1 5 10 15

Ala Ser Ile Leu Lys Gly Tyr Arg Thr Tyr Leu Arg Pro Ile Thr Glu  
 20 25 30  
 Ala Pro Ser Asn Lys Ala Thr Ala Ala Asp Ser Leu Phe Asp Arg Gln  
 35 40 45  
 Gly Phe Leu Lys Ser Arg Asp Arg Ala Tyr Ala Lys Phe Tyr Thr Leu  
 50 55 60  
 Leu Ser Lys Thr Gln Ile Phe Ile Arg Phe Ile Glu Glu Cys Ser Phe  
 65 70 75 80  
 Val Ser Asp Lys Asp Thr Gly Leu Ala Phe Phe Asp Asp Cys Ile Glu  
 85 90 95  
 Lys Leu Phe Pro Asp Lys Gly Thr Glu Lys Thr Asp Lys Val Asp Phe  
 100 105 110  
 Asp Ser Ala Glu Asp Thr Arg Leu Ile Glu Leu Asp Asp Ser Gln Lys  
 115 120 125  
 Ser Glu His Thr Val Phe Ile Met Pro Pro Glu Pro Pro Pro Asp Asp  
 130 135 140  
 Gly Lys Asp Leu Ser Pro Lys Tyr Ser Tyr Lys Tyr Phe Pro Arg Leu  
 145 150 155 160  
 Asp Leu Lys Leu Phe Asp Arg Pro Gln Glu Leu Lys Leu Cys Phe Ser  
 165 170 175  
 Arg His Pro Thr Gly Asn Ser Ile Thr Lys Ser Pro Pro Leu Met Ala  
 180 185 190  
 Lys Arg Thr Lys Gln Glu Ile Lys Thr Ala His Lys Leu Ala Lys Arg  
 195 200 205  
 Cys Tyr Thr Asn Pro Pro Gln Trp Ala Lys Cys Leu Phe Ser His Cys  
 210 215 220  
 Tyr Ser Leu Trp Phe Ile Cys Leu Pro Ala Tyr Val Arg Val Ser His  
 225 230 235 240  
 Pro Lys Val Arg Ala Leu Gln Gln Ala Tyr Asp Val Leu Ile Lys Met

	245		250		255
Arg Lys Thr Asp Val Asp Pro Leu Asp Glu Val Cys Tyr Arg Val Val					
	260		265		270
Met Gln Leu Cys Gly Leu Trp Gly His Pro Val Leu Ala Val Arg Val					
	275		280		285
Leu Phe Glu Met Lys Thr Ala Arg Ile Lys Pro Asn Ala Ile Thr Tyr					
	290		295		300
Gly Tyr Tyr Asn Lys Val Val Leu Glu Ser Pro Trp Pro Ser Ser Thr					
305		310		315	320
Arg Ser Gly Ile Phe Leu Trp Thr Lys Val Arg Asn Val Val Arg Gly					
	325		330		335
Leu Ala Gln Phe Arg Gln Pro Leu Lys Lys Thr Val Gln Arg Ser Gln					
	340		345		350
Val Ser Ser Ile Ser Gly Gly Gln Ser Asp Gln Gly Tyr Gly Ser Lys					
	355		360		365
Asp Glu Leu Ile Lys Asp Asp Ala Glu Ile His Val Pro Glu Glu Gln					
	370		375		380
Ala Ala Arg Glu Leu Ile Thr Lys Thr Lys Met Gln Thr Glu Glu Val					
385		390		395	400
Cys Asp Ala Ser Ala Ile Val Ala Lys His Ser Gln Pro Ser Pro Glu					
	405		410		415
Pro His Ser Pro Thr Glu Pro Pro Ala Trp Gly Ser Ser Ile Val Lys					
	420		425		430
Val Pro Ser Gly Ile Phe Asp Val Asn Ser Arg Lys Ser Ser Thr Gly					
	435		440		445
Ser Ile Ser Ser Val Leu Phe Ser Thr Gln Asp Pro Val Glu Asp Ala					
	450		455		460
Val Phe Gly Glu Ala Thr Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu					
465		470		475	480

出証特 2 0 0 4 - 3 0 5 9 6 6 1



705                      710                      715                      720  
Arg Arg Ser Ser Leu Pro Leu Asp His Gly Ser Pro Ala Gln Glu Asn  
                         725                      730                      735  
Pro Glu Ser Glu Lys Ser Ser Pro Ala Val Ser Arg Ser Lys Thr Phe  
                         740                      745                      750  
Thr Gly Arg Phe Lys Gln Gln Thr Pro Ser Arg Thr His Lys Glu Arg  
                         755                      760                      765  
Ser Thr Ser Leu Ser Ala Leu Val Arg Ser Ser Pro His Gly Ser Leu  
                         770                      775                      780  
Gly Ser Val Val Asn Ser Leu Ser Gly Leu Lys Leu Asp Asn Ile Leu  
785                      790                      795                      800  
Ser Gly Pro Lys Ile Asp Val Leu Lys Ser Gly Met Lys Gln Ala Ala  
                         805                      810                      815  
Thr Val Ala Ser Lys Met Trp Val Ala Val Ala Ser Ala Tyr Ser Tyr  
                         820                      825                      830  
Ser Asp Asp Glu Glu Glu Thr Asn Arg Asp Tyr Ser Phe Pro Ala Gly  
                         835                      840                      845  
Leu Glu Asp His Ile Leu Gly Glu Asn Ile Ser Pro Asn Thr Ser Ile  
                         850                      855                      860  
Ser Gly Leu Val Pro Ser Glu Leu Thr Gln Ser Asn Thr Ser Leu Gly  
865                      870                      875                      880  
Ser Ser Ser Ser Ser Gly Asp Val Gly Lys Leu His Tyr Pro Thr Gly  
                         885                      890                      895  
Glu Val Pro Phe Pro Arg Gly Met Lys Gly Gln Asp Phe Glu Lys Ser  
                         900                      905                      910  
Asp His Gly Ser Ser Gln Asn Thr Ser Met Ser Ser Ile Tyr Gln Asn  
                         915                      920                      925  
Cys Ala Met Glu Val Leu Met Ser Ser Cys Ser Gln Cys Arg Ala Cys  
                         930                      935                      940

Gly Ala Leu Val Tyr Asp Glu Glu Ile Met Ala Gly Trp Thr Ala Asp  
945 950 955 960  
Asp Ser Asn Leu Asn Thr Ala Cys Pro Phe Cys Lys Ser Asn Phe Leu  
965 970 975  
Pro Leu Leu Asn Ile Glu Phe Lys Asp Leu Arg Gly Ser Ala Ser Phe  
980 985 990  
Phe Leu Lys Pro Ser Thr Ser Gly Asp Ser Leu Gln Ser Gly Ser Ile  
995 1000 1005  
Pro Leu Ala Asn Glu Ser Leu Glu His Lys Pro Val Ser Ser Leu Ala  
1010 1015 1020  
Glu Pro Asp Leu Ile Asn Phe Met Asp Phe Pro Lys His Asn Gln Ile  
1025 1030 1035 1040  
Ile Thr Glu Glu Thr Gly Ser Ala Val Glu Pro Ser Asp Glu Ile Lys  
1045 1050 1055  
Arg Ala Ser Gly Asp Val Gln Thr Met Lys Ile Ser Ser Val Pro Asn  
1060 1065 1070  
Ser Leu Ser Lys Arg Asn Val Ser Leu Thr Arg Ser His Ser Val Gly  
1075 1080 1085  
Gly Pro Leu Gln Asn Ile Asp Phe Thr Gln Arg Pro Phe His Gly Ile  
1090 1095 1100  
Ser Thr Val Ser Leu Pro Asn Ser Leu  
1105 1110

&lt;210&gt; 2998

&lt;211&gt; 1162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2998

Met Ala Ser Leu Leu Pro Leu Leu Cys Leu Cys Val Val Ala Ala His  
 1 5 10 15  
 Leu Ala Gly Ala Arg Asp Ala Thr Pro Thr Glu Glu Pro Met Ala Thr  
 20 25 30  
 Ala Leu Gly Leu Glu Arg Arg Ser Val Tyr Thr Gly Gln Pro Ser Pro  
 35 40 45  
 Ala Leu Glu Asp Trp Glu Ala Arg Ala Val Pro Ala Glu Ala Ser Glu  
 50 55 60  
 Trp Thr Ser Trp Phe Asn Val Asp His Pro Gly Gly Asp Gly Asp Phe  
 65 70 75 80  
 Glu Ser Leu Ala Ala Ile Arg Phe Tyr Tyr Gly Pro Ala Arg Val Cys  
 85 90 95  
 Pro Arg Pro Leu Ala Leu Glu Ala Arg Thr Thr Asp Trp Ala Leu Pro  
 100 105 110  
 Ser Ala Val Gly Glu Arg Val His Leu Asn Pro Thr Arg Gly Phe Trp  
 115 120 125  
 Cys Leu Asn Arg Glu Gln Pro Arg Gly Arg Arg Cys Ser Asn Tyr His  
 130 135 140  
 Val Arg Phe Arg Cys Pro Leu Glu Ala Ser Trp Gly Ala Trp Gly Pro  
 145 150 155 160  
 Trp Gly Pro Cys Ser Gly Ser Cys Gly Pro Gly Arg Arg Leu Arg Arg  
 165 170 175  
 Arg His Cys Pro Ser Pro Ala Gly Asp Ala Cys Pro Gly Arg Pro Leu  
 180 185 190  
 Glu Ala Gln Lys Cys Val Arg Pro Arg Cys Pro Gly Cys Ser Leu Asp  
 195 200 205  
 Thr Cys Glu Cys Pro Asp His Ile Leu Leu Gly Ser Val Val Thr Pro  
 210 215 220

Ser Gly Gln Pro Leu Leu Gly Ala Arg Val Ser Leu Arg Asp Gln Pro  
 225 230 235 240  
 Gly Thr Val Ala Thr Ser Asp Ala His Gly Thr Phe Arg Val Pro Gly  
 245 250 255  
 Val Cys Ala Asp Ser Arg Ala Asn Ile Arg Ala Gln Met Asp Gly Phe  
 260 265 270  
 Ser Ala Gly Glu Ala Gln Ala Gln Ala Asn Gly Ser Ile Ser Val Val  
 275 280 285  
 Thr Ile Ile Leu Asp Lys Leu Glu Lys Pro Tyr Leu Val Lys His Pro  
 290 295 300  
 Glu Ser Arg Val Arg Glu Ala Gly Gln Asn Val Thr Phe Cys Cys Lys  
 305 310 315 320  
 Ala Ser Gly Thr Pro Met Pro Lys Lys Tyr Ser Trp Phe His Asn Gly  
 325 330 335  
 Thr Leu Leu Asp Arg Arg Ala His Gly Tyr Gly Ala His Leu Glu Leu  
 340 345 350  
 Arg Gly Leu Arg Pro Asp Gln Ala Gly Ile Tyr His Cys Lys Ala Trp  
 355 360 365  
 Asn Glu Ala Gly Ala Val Arg Ser Gly Thr Ala Arg Leu Thr Val Leu  
 370 375 380  
 Ala Pro Gly Gln Pro Ala Cys Asp Pro Arg Pro Arg Glu Tyr Leu Ile  
 385 390 395 400  
 Lys Leu Pro Glu Asp Cys Gly Gln Pro Gly Ser Gly Pro Ala Tyr Leu  
 405 410 415  
 Asp Val Gly Leu Cys Pro Asp Thr Arg Cys Pro Ser Leu Ala Gly Ser  
 420 425 430  
 Ser Pro Arg Cys Gly Asp Ala Ser Ser Arg Cys Cys Ser Val Arg Arg  
 435 440 445  
 Leu Glu Arg Arg Glu Ile His Cys Pro Gly Tyr Val Leu Pro Val Lys

450 455 460  
Val Val Ala Glu Cys Gly Cys Gln Lys Cys Leu Pro Pro Arg Gly Leu  
465 470 475 480  
Val Arg Gly Arg Val Val Ala Ala Asp Ser Gly Glu Pro Leu Arg Phe  
485 490 495  
Ala Arg Ile Leu Leu Gly Gln Glu Pro Ile Gly Phe Thr Ala Tyr Gln  
500 505 510  
Gly Asp Phe Thr Ile Glu Val Pro Pro Ser Thr Gln Arg Leu Val Val  
515 520 525  
Thr Phe Val Asp Pro Ser Gly Glu Phe Met Asp Ala Val Arg Val Leu  
530 535 540  
Pro Phe Asp Pro Arg Gly Ala Gly Val Tyr His Glu Val Lys Ala Met  
545 550 555 560  
Arg Lys Lys Ala Pro Val Ile Leu His Thr Ser Gln Ser Asn Thr Ile  
565 570 575  
Pro Leu Gly Glu Leu Glu Asp Glu Ala Pro Leu Gly Glu Leu Val Leu  
580 585 590  
Pro Ser Gly Ala Phe Arg Arg Ala Asp Gly Lys Pro Tyr Ser Gly Pro  
595 600 605  
Val Glu Ala Arg Val Thr Phe Val Asp Pro Arg Asp Leu Thr Ser Ala  
610 615 620  
Ala Ser Ala Pro Ser Asp Leu Arg Phe Val Asp Ser Asp Gly Glu Leu  
625 630 635 640  
Ala Pro Leu Arg Thr Tyr Gly Met Phe Ser Val Asp Leu Arg Ala Pro  
645 650 655  
Gly Ser Ala Glu Gln Leu Gln Val Gly Pro Val Ala Val Arg Val Ala  
660 665 670  
Ala Ser Gln Ile His Met Pro Gly His Val Glu Ala Leu Lys Leu Trp  
675 680 685

Ser Leu Asn Pro Glu Thr Gly Leu Trp Glu Glu Glu Ser Gly Phe Arg  
690 695 700  
Arg Glu Gly Ser Ser Gly Pro Arg Val Arg Arg Glu Glu Arg Val Phe  
705 710 715 720  
Leu Val Gly Asn Val Glu Ile Arg Glu Arg Arg Leu Phe Asn Leu Asp  
725 730 735  
Val Pro Glu Arg Arg Arg Cys Phe Val Lys Val Arg Ala Tyr Ala Asn  
740 745 750  
Asp Lys Phe Thr Pro Ser Glu Gln Val Glu Gly Val Val Val Thr Leu  
755 760 765  
Val Asn Leu Glu Pro Ala Pro Gly Phe Ser Ala Asn Pro Arg Ala Trp  
770 775 780  
Gly Arg Phe Asp Ser Ala Val Thr Gly Pro Asn Gly Ala Cys Leu Pro  
785 790 795 800  
Ala Phe Cys Asp Ala Asp Arg Pro Asp Ala Tyr Thr Ala Leu Val Thr  
805 810 815  
Ala Thr Leu Gly Gly Glu Glu Leu Glu Pro Ala Pro Ser Leu Pro Arg  
820 825 830  
Pro Leu Pro Ala Thr Val Gly Val Thr Gln Pro Tyr Leu Asp Arg Leu  
835 840 845  
Gly Tyr Arg Arg Thr Asp His Asp Asp Pro Ala Phe Lys Arg Asn Gly  
850 855 860  
Phe Arg Ile Asn Leu Ala Lys Pro Arg Pro Gly Asp Pro Ala Glu Ala  
865 870 875 880  
Asn Gly Pro Val Tyr Pro Trp Arg Ser Leu Arg Glu Cys Gln Gly Ala  
885 890 895  
Pro Val Thr Ala Ser His Phe Arg Phe Ala Arg Val Glu Ala Asp Lys  
900 905 910  
Tyr Glu Tyr Asn Val Val Pro Phe Arg Glu Gly Thr Pro Ala Ser Trp

915	920	925
Thr Gly Asp Leu Leu Ala Trp Trp Pro Asn Pro Gln Glu Phe Arg Ala		
930	935	940
Cys Phe Leu Lys Val Lys Ile Gln Gly Pro Gln Glu Tyr Met Val Arg		
945	950	955
Ser His Asn Ala Gly Gly Ser His Pro Arg Thr Arg Gly Gln Leu Tyr		
965	970	975
Gly Leu Arg Asp Ala Arg Ser Val Arg Asp Pro Glu Arg Pro Gly Thr		
980	985	990
Ser Ala Ala Cys Val Glu Phe Lys Cys Ser Gly Met Leu Phe Asp Gln		
995	1000	1005
Arg Gln Val Asp Arg Thr Leu Val Thr Ile Met Pro Gln Gly Ser Cys		
1010	1015	1020
Arg Arg Val Ala Val Asn Gly Leu Leu Arg Asp Tyr Leu Thr Arg His		
1025	1030	1035
Pro Pro Pro Val Pro Ala Glu Asp Pro Ala Ala Phe Ser Met Leu Ala		
1045	1050	1055
Pro Leu Asp Pro Leu Gly His Asn Tyr Gly Val Tyr Thr Val Thr Asp		
1060	1065	1070
Gln Ser Pro Arg Leu Ala Lys Glu Ile Ala Ile Gly Arg Cys Phe Asp		
1075	1080	1085
Gly Ser Ser Asp Gly Phe Ser Arg Glu Met Lys Ala Asp Ala Gly Thr		
1090	1095	1100
Ala Val Thr Phe Gln Cys Arg Glu Pro Pro Ala Gly Arg Pro Ser Leu		
1105	1110	1115
Phe Gln Arg Leu Leu Glu Ser Pro Ala Thr Ala Leu Gly Asp Ile Arg		
1125	1130	1135
Arg Glu Met Ser Glu Ala Ala Gln Ala Gln Ala Arg Ala Ser Gly Pro		
1140	1145	1150

Leu Arg Thr Arg Arg Gly Arg Val Arg Gln

1155

1160

<210> 2999

<211> 238

<212> PRT

<213> Homo sapiens

<400> 2999

Met Ser Asn Gln Gln Glu Lys Tyr Glu Ala Gln Asn Ile Val Asn Ser

1

5

10

15

Thr Glu Glu Ser Asp Asp Ala Phe Asp Thr Val Thr Ile Pro Val Pro

20

25

30

Ser Glu Glu Pro Gln Glu Ser Asp Gln Thr Glu Glu His Glu Ser Gly

35

40

45

Ile Glu Gln Phe Ser Glu Ser His Ala Ile His Val Glu Glu Gln Ser

50

55

60

Asp Gln Ser Phe Ser Ser Leu Glu Pro Asp Asn Glu Gln Leu Met Glu

65

70

75

80

Glu Val Ile Ser Pro Arg Gln Val Ser Tyr Thr Pro Gln His His Glu

85

90

95

Lys Gln Tyr Ala Met Gln Arg Pro Asn Asp Asp Ser Leu Ala Phe Leu

100

105

110

Asp Lys Ile Lys Ser Val Lys Glu Ser Leu Gln Glu Ser Val Glu Asp

115

120

125

Ser Leu Ala Thr Val Lys Val Val Leu Ile Pro Val Gly Gln Glu Ile

130

135

140

Val Ile Pro Phe Lys Val Asp Thr Ile Leu Lys Tyr Leu Lys Asp His



145                      150                      155                      160  
Phe Ser His Leu Leu Gly Ile Pro His Ser Val Leu Gln Ile Arg Tyr  
                         165                      170                      175  
Ser Gly Lys Ile Leu Lys Asn Asn Glu Thr Leu Val Gln His Gly Val  
                         180                      185                      190  
Lys Pro Gln Glu Ile Val Gln Val Glu Ile Phe Ser Thr Asn Pro Asp  
                         195                      200                      205  
Leu Tyr Pro Val Arg Arg Ile Asp Gly Leu Thr Asp Val Ser Gln Ile  
                         210                      215                      220  
Ile Thr Val Thr Val Gln Thr Gly Ser Leu Phe Asp Val Phe  
225                      230                      235

&lt;210&gt; 3000

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3000

Met Glu Thr Gln His Arg Val Phe Ala Leu Leu Ser Phe Pro Asn Arg  
1                      5                      10                      15  
Pro Phe Trp Arg Leu Pro Met Phe Gln Glu Thr Gly Ile Pro His Gln  
                         20                      25                      30  
Ser Val Met Thr Gln Ser Pro Ala Gln Thr Thr Gly Pro Pro Gly Gly  
                         35                      40                      45  
Leu Pro Phe Ala Asp Thr Pro Gly Leu Pro Pro Ala Arg Glu Leu Pro  
                         50                      55                      60  
Ser Phe Gln His Ile Gly Gln Ala Gln Asp Arg Val Cys Leu Glu Ala  
65                      70                      75                      80

Ser Gly Pro Gly Ala His Ser Ser Gly Ile Pro Ser Gly Pro Pro Pro  
                             85                            90                            95  
 Cys Arg Gly Lys Ile Val Leu Asp Pro Ser Pro Pro Leu Leu Gln Gly  
                             100                            105                            110  
 Pro Leu Leu Ala His Thr Pro Arg Ala Val Arg Val Ala Gln Gly Arg  
                             115                            120                            125  
 Thr Ala Gly Pro Ala Pro Gln Asp Leu Phe Leu Thr Met Pro Thr Pro  
                             130                            135                            140  
 Ser Ser Leu Val Pro Thr Arg Thr Arg Pro Trp Pro Thr Gly Gln Glu  
 145                            150                            155                            160  
 Gly Pro Ala Leu Pro Arg Ala Gly Thr Lys Ala Pro Ala Ala  
                             165                            170

<210> 3001

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3001

Met Ser Leu Pro Arg Gly Asn Leu Ser Leu Phe Ile Gly Ser Phe Leu  
           1                            5                            10                            15  
 Cys Arg Met Gln Gly Ser Leu Pro Pro Ala Glu Thr Pro Gly Lys Glu  
                             20                            25                            30  
 Ala Thr Cys Gly Gly Asp Leu Asn Gln Asp Gly Arg Asn Leu Gly Ser  
                             35                            40                            45  
 Pro Gly Gly Ser Gly Gln Arg Ser Trp Trp Lys Pro Trp Glu Val Gly  
                             50                            55                            60  
 Leu Pro Leu Gly Phe Ser Pro Gly His Val Ala His Val Trp Leu Ser

65                      70                      75                      80  
Leu Gly Pro Asp Pro Ser Leu His Thr Glu Leu His Phe Tyr Arg Ala  
                         85                      90                      95  
Leu Ser Leu Ala Ala Gly Ser Ser Ser His Pro Leu Leu Ser Thr Pro  
                         100                      105                      110  
Ile Pro Leu Leu  
                         115

<210> 3002

<211> 538

<212> PRT

<213> Homo sapiens

<400> 3002

Met Thr Lys Ser Lys Glu Ala Val Thr Phe Lys Asp Val Ala Val Val  
1                      5                      10                      15  
Phe Ser Glu Glu Glu Leu Gln Leu Leu Asp Leu Ala Gln Arg Lys Leu  
                         20                      25                      30  
Tyr Arg Asp Val Met Leu Glu Asn Phe Arg Asn Val Val Ser Val Gly  
                         35                      40                      45  
His Gln Ser Thr Pro Asp Gly Leu Pro Gln Leu Glu Arg Glu Glu Lys  
                         50                      55                      60  
Leu Trp Met Met Lys Met Ala Thr Gln Arg Asp Asn Ser Ser Gly Ala  
65                      70                      75                      80  
Lys Asn Leu Lys Glu Met Glu Thr Leu Gln Glu Val Gly Leu Arg Tyr  
                         85                      90                      95  
Leu Pro His Glu Glu Leu Phe Cys Ser Gln Ile Trp Gln Gln Ile Thr  
                         100                      105                      110

Arg	Glu	Leu	Ile	Lys	Tyr	Gln	Asp	Ser	Val	Val	Asn	Ile	Gln	Arg	Thr
115				120				125							
Gly	Cys	Gln	Leu	Glu	Lys	Arg	Asp	Asp	Leu	His	Tyr	Lys	Asp	Glu	Gly
130				135				140							
Phe	Ser	Asn	Gln	Ser	Ser	His	Leu	Gln	Val	His	Arg	Val	His	Thr	Gly
145				150				155				160			
Glu	Lys	Pro	Tyr	Lys	Gly	Glu	His	Cys	Val	Lys	Ser	Phe	Ser	Trp	Ser
165				170				175							
Ser	His	Leu	Gln	Ile	Asn	Gln	Arg	Ala	His	Ala	Gly	Glu	Lys	Pro	Tyr
180				185				190							
Lys	Cys	Glu	Lys	Cys	Asp	Asn	Ala	Phe	Arg	Arg	Phe	Ser	Ser	Leu	Gln
195				200				205							
Ala	His	Gln	Arg	Val	His	Ser	Arg	Ala	Lys	Ser	Tyr	Thr	Asn	Asp	Ala
210				215				220							
Ser	Tyr	Arg	Ser	Phe	Ser	Gln	Arg	Ser	His	Leu	Pro	His	His	Gln	Arg
225				230				235				240			
Val	Pro	Thr	Gly	Glu	Asn	Pro	Tyr	Lys	Tyr	Glu	Glu	Cys	Gly	Lys	Asn
245				250				255							
Val	Gly	Lys	Ser	Ser	His	Cys	Gln	Ala	Pro	Leu	Ile	Val	His	Thr	Gly
260				265				270							
Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Val	Gly	Phe	Ser	Gln	Arg
275				280				285							
Ser	Tyr	Leu	Gln	Val	His	Leu	Lys	Val	His	Ala	Gly	Lys	Lys	Arg	Tyr
290				295				300							
Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Trp	Arg	Ser	Arg	Leu	Gln
305				310				315				320			
Ala	His	Glu	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Asn	Ala
325				330				335							
Cys	Gly	Lys	Ser	Phe	Ser	Tyr	Ser	Ser	His	Leu	Asn	Ile	His	Cys	Arg

340 345 350  
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Gly  
355 360 365  
Phe Ser Val Gly Ser His Leu Gln Ala His Gln Ile Ser His Thr Gly  
370 375 380  
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Gly Phe Cys Arg Ala  
385 390 395 400  
Ser Asn Leu Leu Asp His Gln Arg Gly His Thr Gly Glu Lys Pro Tyr  
405 410 415  
Gln Cys Asp Ala Cys Gly Lys Gly Phe Ser Arg Ser Ser Asp Phe Asn  
420 425 430  
Ile His Phe Arg Val His Thr Gly Lys Asn Pro Ile Asn Val Arg Ser  
435 440 445  
Val Ala Arg Ala Ser Ala Arg Pro Gln Ile Phe Trp Pro Ile Lys Glu  
450 455 460  
Ala Thr Leu Glu Arg Asn Pro Thr Asn Val Val His Val Gly Arg Ala  
465 470 475 480  
Ser Val Gly Ala Gln Ile Leu Met Tyr Thr Val Glu Ser Thr Gln Glu  
485 490 495  
Arg Asn Pro Ile Asn Ala Arg Ser Val Val Arg Pro Ser Val Ser Ser  
500 505 510  
Pro Ala Phe Arg Cys Ile Arg Glu Phe Thr Leu Glu Arg Asn His Ile  
515 520 525  
Ser Val Gln Ser Val Gly Arg Ala Ser Val  
530 535

&lt;210&gt; 3003

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3003

Met Gln Thr Cys Ser Gly Lys Gly Ile Lys Met Ala Phe Leu Asp Val

1 5 10 15

Gln Ser Ser Ser Thr Pro Gln Ser Leu Pro Leu Leu Leu Phe Ser His

20 25 30

Arg Glu Gly Gly Gly Arg Gly Ala Gly Asp Pro Gly Ala Pro Ala Val

35 40 45

Val Pro Ala Pro Val Ser Ala Pro Arg Pro Ala Ser Ser Pro Ala Arg

50 55 60

Ser Glu Ser Arg Ser Pro Pro Leu Thr Leu Ile Ser Arg His Ile Thr

65 70 75 80

Cys Cys Ser Cys Glu Ser Pro Gly Asp Val Leu Leu Ser Gly Arg Gly

85 90 95

Gly Gly Gly Gly Gly Gly Gly Gly Ala Arg Thr Gly Gly Gly Glu Gly

100 105 110

Glu Asp Arg Arg Pro Arg Pro Asp Phe Ser Arg Val Thr Ala Val Ala

115 120 125

Ile Pro Gly Trp Met Glu Val Glu Ser Pro Pro His Pro Pro Pro Gln

130 135 140

Pro Gln Val Cys Pro Thr Pro Ser Gln Gly Ala Pro Gly His Gly Arg

145 150 155 160

Ala Gly Leu Pro Glu Gly Lys Gly Pro Gly Gly Arg Asp Trp Val Arg

165 170 175

Ser Gln Ser Ser Arg Cys Ser Arg Ala Thr Leu Phe Gly His Arg Ala

180 185 190

Pro Ser Pro Ala Ala Pro Arg Arg Gly Arg Leu Pro Ala Pro Gly Phe

195                      200                      205  
Pro Ser Leu His Ser Ala Val Ser Leu Phe  
210                      215

<210> 3004

<211> 802

<212> PRT

<213> Homo sapiens

<400> 3004

Met Gln Pro Gln Ile Val Ala Val Pro Leu Val Leu Asn Lys Met Met  
1                      5                      10                      15  
Ala Lys Val Leu Glu Arg Asn Glu Glu Pro Leu Glu Met Asp Leu Leu  
20                      25                      30  
Leu Asn Ser Gln Val Leu Arg Glu Lys Asn Lys Arg Arg Lys Ile Lys  
35                      40                      45  
Gly Lys Lys Glu Arg Ser Gln Val Asp Gln Leu Leu Asn Ile Ser Leu  
50                      55                      60  
Arg Glu Glu Glu Leu Ser Lys Ser Leu Gln Cys Met Asp Asn Asn Leu  
65                      70                      75                      80  
Leu Gln Ala Arg Ala Ala Leu Gln Thr Ala Tyr Val Glu Val Gln Arg  
85                      90                      95  
Leu Leu Met Leu Lys Gln Gln Ile Thr Met Glu Met Ser Ala Leu Arg  
100                      105                      110  
Thr His Arg Ile Gln Ile Leu Gln Gly Leu Gln Glu Thr Tyr Glu Pro  
115                      120                      125  
Ser Glu His Pro Asp Gln Val Pro Cys Ser Leu Thr Arg Glu Arg Arg  
130                      135                      140

Asn Ser Arg Ser Gln Thr Ser Ile Asp Ala Ala Leu Leu Pro Thr Pro  
 145                      150                      155                      160  
 Phe Phe Pro Leu Phe Leu Glu Pro Pro Ser Ser His Val Ser Pro Ser  
                             165                      170                      175  
 Pro Thr Gly Ala Ser Leu Gln Ile Thr Thr Ser Pro Thr Phe Gln Thr  
                             180                      185                      190  
 His Gly Ser Val Pro Ala Pro Asp Ser Ser Val Gln Ile Lys Gln Glu  
                             195                      200                      205  
 Pro Met Ser Pro Glu Gln Asp Glu Asn Val Asn Ala Val Pro Pro Ser  
                             210                      215                      220  
 Ser Ala Cys Asn Val Ser Lys Glu Leu Leu Glu Ala Asn Lys Thr Pro  
 225                      230                      235                      240  
 Leu Glu Lys Glu Pro His Ser Pro Ala Asp Gln Pro Glu Gln Gln Ala  
                             245                      250                      255  
 Glu Ser Thr Leu Thr Ser Ala Glu Thr Arg Gly Ser Lys Lys Lys Lys  
                             260                      265                      270  
 Lys Leu Arg Lys Lys Lys Ser Leu Arg Ala Ala His Val Pro Glu Asn  
                             275                      280                      285  
 Ser Asp Thr Glu Gln Asp Val Leu Thr Val Lys Pro Val Arg Lys Val  
                             290                      295                      300  
 Lys Ala Gly Lys Leu Ile Lys Gly Gly Lys Val Thr Thr Ser Thr Trp  
 305                      310                      315                      320  
 Glu Asp Ser Arg Thr Gly Arg Glu Gln Glu Ser Val Arg Asp Glu Pro  
                             325                      330                      335  
 Asp Ser Asp Ser Ser Leu Glu Val Leu Glu Ile Pro Asn Pro Gln Leu  
                             340                      345                      350  
 Glu Val Val Ala Ile Asp Ser Ser Glu Ser Gly Glu Glu Lys Pro Asp  
                             355                      360                      365  
 Ser Pro Ser Lys Lys Asp Ile Trp Asn Ser Thr Glu Gln Asn Pro Leu



370	375	380
Glu Thr Ser Arg Ser Gly Cys Asp Glu Val Ser Ser Thr Ser Glu Ile		
385	390	395
Gly Thr Arg Tyr Lys Asp Gly Ile Pro Val Ser Val Ala Glu Thr Gln		
405	410	415
Thr Val Ile Ser Ser Ile Lys Gly Ser Lys Asn Ser Ser Glu Ile Ser		
420	425	430
Ser Glu Pro Gly Asp Asp Asp Glu Pro Thr Glu Gly Ser Phe Glu Gly		
435	440	445
His Gln Ala Ala Val Asn Ala Ile Gln Ile Phe Gly Asn Leu Leu Tyr		
450	455	460
Thr Cys Ser Ala Asp Lys Thr Val Arg Val Tyr Asn Leu Val Ser Arg		
465	470	475
Lys Cys Ile Gly Val Phe Glu Gly His Thr Ser Lys Val Asn Cys Leu		
485	490	495
Leu Val Thr Gln Thr Ser Gly Lys Asn Ala Ala Leu Tyr Thr Gly Ser		
500	505	510
Ser Asp His Thr Ile Arg Cys Tyr Asn Val Lys Ser Arg Glu Cys Val		
515	520	525
Glu Gln Leu Gln Leu Glu Asp Arg Val Leu Cys Leu His Ser Arg Trp		
530	535	540
Arg Ile Leu Tyr Ala Gly Leu Ala Asn Gly Thr Val Val Thr Phe Asn		
545	550	555
Ile Lys Asn Asn Lys Arg Leu Glu Ile Phe Glu Cys His Gly Pro Arg		
565	570	575
Ala Val Ser Cys Leu Ala Thr Ala Gln Glu Gly Ala Arg Lys Leu Leu		
580	585	590
Val Val Gly Ser Tyr Asp Cys Thr Ile Ser Val Arg Asp Ala Arg Asn		
595	600	605

Gly Leu Leu Leu Arg Thr Leu Glu Gly His Ser Lys Thr Ile Leu Cys  
610 615 620  
Met Lys Val Val Asn Asp Leu Val Phe Ser Gly Ser Ser Asp Gln Ser  
625 630 635 640  
Val His Ala His Asn Ile His Thr Gly Glu Leu Val Arg Ile Tyr Lys  
645 650 655  
Gly His Asn His Ala Val Thr Val Val Asn Ile Leu Gly Lys Val Met  
660 665 670  
Val Thr Ala Cys Leu Asp Lys Phe Val Arg Val Tyr Glu Leu Gln Ser  
675 680 685  
His Asp Arg Leu Gln Val Tyr Gly Gly His Lys Asp Met Ile Met Cys  
690 695 700  
Met Thr Ile His Lys Ser Met Ile Tyr Thr Gly Cys Tyr Asp Gly Ser  
705 710 715 720  
Ile Gln Ala Val Arg Leu Asn Leu Met Gln Asn Tyr Arg Cys Trp Trp  
725 730 735  
His Gly Cys Ser Leu Ile Phe Gly Val Val Asp His Leu Lys Gln His  
740 745 750  
Leu Leu Thr Asp His Thr Asn Pro Asn Phe Gln Thr Leu Lys Cys Arg  
755 760 765  
Trp Lys Asn Cys Asp Ala Phe Phe Thr Ala Arg Lys Gly Ser Lys Gln  
770 775 780  
Asp Ala Ala Gly His Ile Glu Arg His Ala Glu Asp Asp Ser Lys Ile  
785 790 795 800  
Asp Ser

&lt;210&gt; 3005

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3005

Met Gly Pro Gly Gly Arg Val Ala Arg Leu Leu Ala Pro Leu Met Trp

1 5 10 15

Arg Arg Ala Val Ser Ser Val Ala Gly Ser Ala Val Gly Ala Glu Pro

20 25 30

Gly Leu Arg Leu Leu Ala Val Gln Arg Leu Pro Val Gly Ala Ala Phe

35 40 45

Cys Arg Ala Cys Gln Thr Pro Asn Phe Val Arg Gly Leu His Ser Glu

50 55 60

Pro Gly Leu Glu Glu Arg Ala Glu Gly Thr Val Asn Glu Gly Arg Pro

65 70 75 80

Glu Ser Asp Ala Ala Asp His Thr Gly Pro Lys Phe Asp Ile Asp Met

85 90 95

Met Val Ser Leu Leu Arg Gln Glu Asn Ala Arg Asp Ile Cys Val Ile

100 105 110

Gln Val Pro Pro Glu Met Arg Tyr Thr Asp Tyr Phe Val Ile Val Ser

115 120 125

Gly Thr Ser Thr Arg His Leu His Ala Met Ala Phe Tyr Val Val Lys

130 135 140

Met Tyr Lys His Leu Lys Cys Lys Arg Asp Pro His Val Lys Ile Glu

145 150 155 160

Gly Lys Asp Thr Asp Asp Trp Leu Cys Val Asp Phe Gly Ser Met Val

165 170 175

Ile His Leu Met Leu Pro Glu Thr Arg Glu Ile Tyr Glu Leu Glu Lys

180 185 190

Leu Trp Thr Leu Arg Ser Tyr Asp Asp Gln Leu Ala Gln Ile Ala Pro  
195 200 205  
Glu Thr Val Pro Glu Asp Phe Ile Leu Gly Ile Glu Asp Asp Thr Ser  
210 215 220  
Ser Val Thr Pro Val Glu Leu Lys Cys Glu  
225 230

<210> 3006

<211> 576

<212> PRT

<213> Homo sapiens

<400> 3006

Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val  
1 5 10 15  
Ala Ala Leu Leu Leu Leu Leu Leu Leu Leu Gly Val Pro Pro Arg Ser  
20 25 30  
Leu Ala Leu Pro Pro Ile Arg Tyr Ser His Ala Gly Ile Cys Pro Asn  
35 40 45  
Asp Met Asn Pro Asn Leu Trp Val Asp Ala Gln Ser Thr Cys Arg Arg  
50 55 60  
Glu Cys Glu Thr Asp Gln Glu Cys Glu Thr Tyr Glu Lys Cys Cys Pro  
65 70 75 80  
Asn Val Cys Gly Thr Lys Ser Cys Val Ala Ala Arg Tyr Met Asp Val  
85 90 95  
Lys Gly Lys Lys Gly Pro Val Gly Met Pro Lys Glu Ala Thr Cys Asp  
100 105 110  
His Phe Met Cys Leu Gln Gln Gly Ser Glu Cys Asp Ile Trp Asp Gly

115 120 125  
Gln Pro Val Cys Lys Cys Lys Asp Arg Cys Glu Lys Glu Pro Ser Phe  
130 135 140  
Thr Cys Ala Ser Asp Gly Leu Thr Tyr Tyr Asn Arg Cys Tyr Met Asp  
145 150 155 160  
Ala Glu Ala Cys Ser Lys Gly Ile Thr Leu Ala Val Val Thr Cys Arg  
165 170 175  
Tyr His Phe Thr Trp Pro Asn Thr Ser Pro Pro Pro Pro Glu Thr Thr  
180 185 190  
Met His Pro Thr Thr Ala Ser Pro Glu Thr Pro Glu Leu Asp Met Ala  
195 200 205  
Ala Pro Ala Leu Leu Asn Asn Pro Val His Gln Ser Val Thr Met Gly  
210 215 220  
Glu Thr Val Ser Phe Leu Cys Asp Val Val Gly Arg Pro Arg Pro Glu  
225 230 235 240  
Ile Thr Trp Glu Lys Gln Leu Glu Asp Arg Glu Asn Val Val Met Arg  
245 250 255  
Pro Asn His Val Arg Gly Asn Val Val Val Thr Asn Ile Ala Gln Leu  
260 265 270  
Val Ile Tyr Asn Ala Gln Leu Gln Asp Ala Gly Ile Tyr Thr Cys Thr  
275 280 285  
Ala Arg Asn Val Ala Gly Val Leu Arg Ala Asp Phe Pro Leu Ser Val  
290 295 300  
Val Arg Gly His Gln Ala Ala Ala Thr Ser Glu Ser Ser Pro Asn Gly  
305 310 315 320  
Thr Ala Phe Pro Ala Ala Glu Cys Leu Lys Pro Pro Asp Ser Glu Asp  
325 330 335  
Cys Gly Glu Glu Gln Thr Arg Trp His Phe Asp Ala Gln Ala Asn Asn  
340 345 350

Cys	Leu	Thr	Phe	Thr	Phe	Gly	His	Cys	His	Arg	Asn	Leu	Asn	His	Phe
355			360			365									
Glu	Thr	Tyr	Glu	Ala	Cys	Met	Leu	Ala	Cys	Met	Ser	Gly	Pro	Leu	Ala
370			375			380									
Ala	Cys	Ser	Leu	Pro	Ala	Leu	Gln	Gly	Pro	Cys	Lys	Ala	Tyr	Ala	Pro
385			390			395			400						
Arg	Trp	Ala	Tyr	Asn	Ser	Gln	Thr	Gly	Gln	Cys	Gln	Ser	Phe	Val	Tyr
405			410			415									
Gly	Gly	Cys	Glu	Gly	Asn	Gly	Asn	Asn	Phe	Glu	Ser	Arg	Glu	Ala	Cys
420			425			430									
Glu	Glu	Ser	Cys	Pro	Phe	Pro	Arg	Gly	Asn	Gln	Arg	Cys	Arg	Ala	Cys
435			440			445									
Lys	Pro	Arg	Gln	Lys	Leu	Val	Thr	Ser	Phe	Cys	Arg	Ser	Asp	Phe	Val
450			455			460									
Ile	Leu	Gly	Arg	Val	Ser	Glu	Leu	Thr	Glu	Glu	Pro	Asp	Ser	Gly	Arg
465			470			475			480						
Ala	Leu	Val	Thr	Val	Asp	Glu	Val	Leu	Lys	Asp	Glu	Lys	Met	Gly	Leu
485			490			495									
Lys	Phe	Leu	Gly	Gln	Glu	Pro	Leu	Glu	Val	Thr	Leu	Leu	His	Val	Asp
500			505			510									
Trp	Ala	Cys	Pro	Cys	Pro	Asn	Val	Thr	Val	Ser	Glu	Met	Pro	Leu	Ile
515			520			525									
Ile	Met	Gly	Glu	Val	Asp	Gly	Gly	Met	Ala	Met	Leu	Arg	Pro	Asp	Ser
530			535			540									
Phe	Val	Gly	Ala	Ser	Ser	Ala	Arg	Arg	Val	Arg	Lys	Leu	Arg	Glu	Val
545			550			555			560						
Met	His	Lys	Lys	Thr	Cys	Asp	Val	Leu	Lys	Glu	Phe	Leu	Gly	Leu	His
565			570			575									

&lt;210&gt; 3007

&lt;211&gt; 600

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3007

Met Ala Ile Glu Ala Val His Ser Asn Ala Ile Arg Asp Lys Lys Lys

1 5 10 15

Leu Gln Met Asp Leu Glu Glu Gln His Asn Lys Asp Lys Leu Asn Leu

20 25 30

Glu Glu Asp Lys Asn Gln Leu Gln Gln Glu Leu Glu Asn Leu Lys Glu

35 40 45

Val Leu Glu Asp Lys Leu Asn Thr Ala Asn Gln Glu Ile Gly His Leu

50 55 60

Gln Asp Met Val Arg Lys Ser Glu Gln Gly Leu Gly Ser Ala Glu Gly

65 70 75 80

Leu Ile Ala Ser Leu Gln Asp Ser Gln Glu Arg Leu Gln Asn Glu Leu

85 90 95

Asp Leu Thr Lys Asp Ser Leu Lys Glu Thr Lys Asp Ala Leu Leu Asn

100 105 110

Val Glu Gly Glu Leu Glu Gln Glu Arg Gln Gln His Glu Glu Thr Ile

115 120 125

Ala Ala Met Lys Glu Glu Glu Lys Leu Lys Val Asp Lys Met Ala His

130 135 140

Asp Leu Glu Ile Lys Trp Thr Glu Asn Leu Arg Gln Glu Cys Ser Lys

145 150 155 160

Leu Arg Glu Glu Leu Arg Leu Gln His Glu Glu Asp Lys Lys Ser Ala

165 170 175

Met Ser Gln Leu Leu Gln Leu Lys Asp Arg Glu Lys Asn Ala Ala Arg  
180 185 190  
Asp Ser Trp Gln Lys Lys Val Glu Asp Leu Leu Asn Gln Ile Ser Leu  
195 200 205  
Leu Lys Gln Asn Leu Glu Ile Gln Leu Ser Gln Ser Gln Thr Ser Leu  
210 215 220  
Gln Gln Leu Gln Ala Gln Phe Thr Gln Glu Arg Gln Arg Leu Thr Gln  
225 230 235 240  
Glu Leu Glu Glu Leu Glu Glu Gln His Gln Gln Arg His Lys Ser Leu  
245 250 255  
Lys Glu Ala His Val Leu Ala Phe Gln Thr Met Glu Glu Glu Lys Glu  
260 265 270  
Lys Glu Gln Arg Ala Leu Glu Asn His Leu Gln Gln Lys His Ser Ala  
275 280 285  
Glu Leu Gln Ser Leu Lys Asp Ala His Arg Glu Ser Met Glu Gly Phe  
290 295 300  
Arg Ile Glu Met Glu Gln Glu Leu Gln Thr Leu Arg Phe Glu Leu Glu  
305 310 315 320  
Asp Glu Gly Lys Ala Met Leu Ala Pro Leu Arg Ser Glu Leu Asn His  
325 330 335  
Gln His Ala Ala Ala Ile Asp Leu Leu Arg His Asn His His Gln Glu  
340 345 350  
Leu Ala Ala Ala Lys Met Glu Leu Glu Arg Ser Ile Asp Ile Ser Arg  
355 360 365  
Arg Gln Ser Lys Glu His Ile Cys Arg Ile Thr Asp Leu Gln Glu Glu  
370 375 380  
Leu Arg His Arg Glu His His Ile Ser Glu Leu Asp Lys Glu Val Gln  
385 390 395 400  
His Leu His Glu Asn Ile Ser Ala Leu Thr Lys Glu Leu Glu Phe Lys



405 410 415  
Gly Lys Glu Ile Leu Arg Ile Arg Ser Glu Ser Asn Gln Gln Ile Arg  
420 425 430  
Leu Glu Glu Met Glu Glu Lys Tyr Leu Met Arg Glu Ser Lys Pro Glu  
435 440 445  
Asp Ile Gln Met Ile Thr Glu Leu Lys Ala Met Leu Thr Glu Arg Asp  
450 455 460  
Gln Ile Ile Lys Lys Leu Ile Glu Asp Asn Lys Phe Tyr Gln Leu Glu  
465 470 475 480  
Leu Val Asn Arg Glu Thr Asn Phe Asn Lys Val Phe Asn Ser Ser Pro  
485 490 495  
Thr Val Gly Val Ile Asn Pro Leu Ala Lys Gln Lys Lys Lys Asn Asp  
500 505 510  
Lys Ser Pro Thr Asn Arg Phe Val Ser Val Pro Asn Leu Ser Ala Leu  
515 520 525  
Glu Ser Gly Gly Val Gly Asn Gly His Pro Asn Arg Leu Asp Pro Ile  
530 535 540  
Pro Asn Ser Pro Val His Asp Ile Glu Phe Asn Ser Ser Lys Pro Leu  
545 550 555 560  
Pro Gln Pro Val Pro Pro Lys Gly Pro Lys Thr Phe Leu Ser Pro Ala  
565 570 575  
Gln Ser Glu Ala Ser Pro Val Ala Ser Pro Asp Pro Gln Arg Gln Glu  
580 585 590  
Trp Phe Ala Arg Tyr Phe Thr Phe  
595 600

&lt;210&gt; 3008

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3008

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Met Asn Ser Asn Lys Val Pro Ser Ala Ala Pro Gly Pro Gly Phe Pro
  1              5              10              15
Leu Leu Trp Leu Pro Arg Asp Pro Pro Ala Pro Ala Ser Gly Pro Gly
          20              25              30
Phe Pro Gly Ser Ser Ser Gln His Pro Gly Pro Pro Pro Cys Leu Thr
          35              40              45
Arg Ser Arg Ala Cys Ala Leu Gly Gly Pro Arg Ser Leu Thr Cys Pro
          50              55              60
Gly Leu Gly Pro Gln Phe Ala Cys Thr Val Ile Ala Ile Leu Leu His
          65              70              75              80
Phe Leu Tyr Leu Cys Thr Phe Ser Trp Ala Leu Leu Glu Ala Leu His
          85              90              95
Leu Tyr Arg Ala Leu Thr Glu Val Arg Asp Val Asn Thr Gly Pro Met
          100             105             110
Arg Phe Tyr Tyr Met Leu Gly Trp Gly Val Pro Ala Phe Ile Thr Gly
          115             120             125
Thr Pro Thr His Ser His Ile Pro Gly Ser Thr Phe Val Pro Cys Ser
          130             135             140
Leu His Pro His Thr Gly Pro Glu Ala Pro His Pro His Ala Pro Gly
          145             150             155             160
Arg Leu Ile His Arg Cys Pro Ser Gly Leu Thr Gln Thr Leu Gln Pro
          165             170             175
Pro Pro Arg Arg His Ser Leu Ile Leu Gly Arg Ser Val Gly Ala Asp
          180             185             190
Gly Gly Gln Asn Pro Phe Pro Cys Phe Met Pro Gly Pro Val Ser Pro

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195	200	205
Pro Ala Arg Ser Pro Thr Ser Gln Ala Pro His His Pro Ser Thr Ala		
210	215	220
Pro Val Cys Leu His Ala Pro Gly Leu Ala Val Gly Leu Asp Pro Glu		
225	230	235
Gly Tyr Gly Asn Pro Asp Phe Cys Trp Leu Ser Ile Tyr Asp Thr Leu		
245	250	255
Ile Trp Ser Phe Ala Gly Pro Val Ala Phe Ala Val Ser Met Ser Val		
260	265	270
Phe Leu Tyr Ile Leu Ala Ala Arg Ala Ser Cys Ala Ala Gln Arg Gln		
275	280	285
Gly Phe Glu Lys Lys Gly Pro Val Ser Gly Leu Gln Pro Ser Phe Ala		
290	295	300
Val Leu Leu Leu Leu Ser Ala Thr Trp Leu Leu Ala Leu Leu Ser Val		
305	310	315
Asn Ser Asp Thr Leu Leu Phe His Tyr Leu Phe Ala Thr Cys Asn Cys		
325	330	335
Ile Gln Val Pro Gly Pro Ala Cys Gly Glu Gly Arg His Leu Gly Cys		
340	345	350
Gly Cys Leu Asn Met His Arg Pro Leu Leu Pro Leu Ala Cys Gln Gly		
355	360	365
Pro Phe Ile Phe Leu Ser Tyr Val Val Leu Ser Lys Glu Val Arg Lys		
370	375	380
Ala Leu Lys Leu Ala Cys Ser Arg Lys Pro Ser Pro Asp Pro Ala Leu		
385	390	395
Thr Thr Lys Ser Thr Leu Thr Ser Ser Tyr Asn Cys Pro Ser Pro Tyr		
405	410	415
Ala Asp Gly Arg Leu Tyr Gln Pro Tyr Gly Asp Ser Ala Gly Ser Leu		
420	425	430

His Ser Thr Ser Arg Ser Gly Lys Ser Gln Pro Ser Tyr Ile Pro Phe  
435 440 445  
Leu Leu Arg  
450

<210> 3009

<211> 928

<212> PRT

<213> Homo sapiens

<400> 3009

Met Lys Pro Arg Ala Arg Gly Trp Arg Gly Leu Ala Ala Leu Trp Met  
1 5 10 15  
Leu Leu Ala Gln Val Ala Glu Gln Ala Pro Ala Cys Ala Met Gly Pro  
20 25 30  
Ala Ala Ala Ala Pro Gly Ser Pro Ser Val Pro Arg Pro Pro Pro  
35 40 45  
Ala Glu Arg Pro Gly Trp Met Glu Lys Gly Glu Tyr Asp Leu Val Ser  
50 55 60  
Ala Tyr Glu Val Asp His Arg Gly Asp Tyr Val Ser His Glu Ile Met  
65 70 75 80  
His His Gln Arg Arg Arg Arg Ala Val Pro Val Ser Glu Val Glu Ser  
85 90 95  
Leu His Leu Arg Leu Lys Gly Ser Arg His Asp Phe His Val Asp Leu  
100 105 110  
Arg Thr Ser Ser Ser Leu Val Ala Pro Gly Phe Ile Val Gln Thr Leu  
115 120 125  
Gly Lys Thr Gly Thr Lys Ser Val Gln Thr Leu Pro Pro Glu Asp Phe

130 135 140  
Cys Phe Tyr Gln Gly Ser Leu Arg Ser His Arg Asn Ser Ser Val Ala  
145 150 155 160  
Leu Ser Thr Cys Gln Gly Leu Ser Gly Met Ile Arg Thr Glu Glu Ala  
165 170 175  
Asp Tyr Phe Leu Arg Pro Leu Pro Ser His Leu Ser Trp Lys Leu Gly  
180 185 190  
Arg Ala Ala Gln Gly Ser Ser Pro Ser His Val Leu Tyr Lys Arg Ser  
195 200 205  
Thr Glu Pro His Ala Pro Gly Ala Ser Glu Val Leu Val Thr Ser Arg  
210 215 220  
Thr Trp Glu Leu Ala His Gln Pro Leu His Ser Ser Asp Leu Arg Leu  
225 230 235 240  
Gly Leu Pro Gln Lys Gln His Phe Cys Gly Arg Arg Lys Lys Tyr Met  
245 250 255  
Pro Gln Pro Pro Lys Glu Asp Leu Phe Ile Leu Pro Asp Glu Tyr Lys  
260 265 270  
Ser Cys Leu Arg His Lys Arg Ser Leu Leu Arg Ser His Arg Asn Glu  
275 280 285  
Glu Leu Asn Val Glu Thr Leu Val Val Val Asp Lys Lys Met Met Gln  
290 295 300  
Asn His Gly His Glu Asn Ile Thr Thr Tyr Val Leu Thr Ile Leu Asn  
305 310 315 320  
Met Val Ser Ala Leu Phe Lys Asp Gly Thr Ile Gly Gly Asn Ile Asn  
325 330 335  
Ile Ala Ile Val Gly Leu Ile Leu Leu Glu Asp Glu Gln Pro Gly Leu  
340 345 350  
Val Ile Ser His His Ala Asp His Thr Leu Ser Ser Phe Cys Gln Trp  
355 360 365

Gln Ser Gly Leu Met Gly Lys Asp Gly Thr Arg His Asp His Ala Ile  
 370 375 380  
 Leu Leu Thr Gly Leu Asp Ile Cys Ser Trp Lys Asn Glu Pro Cys Asp  
 385 390 395 400  
 Thr Leu Gly Phe Ala Pro Ile Ser Gly Met Cys Ser Lys Tyr Arg Ser  
 405 410 415  
 Cys Thr Ile Asn Glu Asp Thr Gly Leu Gly Leu Ala Phe Thr Ile Ala  
 420 425 430  
 His Glu Ser Gly His Asn Phe Gly Met Ile His Asp Gly Glu Gly Asn  
 435 440 445  
 Met Cys Lys Lys Ser Glu Gly Asn Ile Met Ser Pro Thr Leu Ala Gly  
 450 455 460  
 Arg Asn Gly Val Phe Ser Trp Ser Pro Cys Ser Arg Gln Tyr Leu His  
 465 470 475 480  
 Lys Phe Leu Ser Thr Ala Gln Ala Ile Cys Leu Ala Asp Gln Pro Lys  
 485 490 495  
 Pro Val Lys Glu Tyr Lys Tyr Pro Glu Lys Leu Pro Gly Glu Leu Tyr  
 500 505 510  
 Asp Ala Asn Thr Gln Cys Lys Trp Gln Phe Gly Glu Lys Ala Lys Leu  
 515 520 525  
 Cys Met Leu Asp Phe Lys Lys Asp Ile Cys Lys Ala Leu Trp Cys His  
 530 535 540  
 Arg Ile Gly Arg Lys Cys Glu Thr Lys Phe Met Pro Ala Ala Glu Gly  
 545 550 555 560  
 Thr Ile Cys Gly His Asp Met Trp Cys Arg Gly Gly Gln Cys Val Lys  
 565 570 575  
 Tyr Gly Asp Glu Gly Pro Lys Pro Thr His Gly His Trp Ser Asp Trp  
 580 585 590  
 Ser Ser Trp Ser Pro Cys Ser Arg Thr Cys Gly Gly Gly Val Ser His

595 600 605  
Arg Ser Arg Leu Cys Thr Asn Pro Lys Pro Ser His Gly Gly Lys Phe  
610 615 620  
Cys Glu Gly Ser Thr Arg Thr Leu Lys Leu Cys Asn Ser Gln Lys Cys  
625 630 635 640  
Pro Arg Asp Ser Val Asp Phe Arg Ala Ala Gln Cys Ala Glu His Asn  
645 650 655  
Ser Arg Arg Phe Arg Gly Arg His Tyr Lys Trp Lys Pro Tyr Thr Gln  
660 665 670  
Val Glu Asp Gln Asp Leu Cys Lys Leu Tyr Cys Ile Ala Glu Gly Phe  
675 680 685  
Asp Phe Phe Phe Ser Leu Ser Asn Lys Val Lys Asp Gly Thr Pro Cys  
690 695 700  
Ser Glu Asp Ser Arg Asn Val Cys Ile Asp Gly Ile Cys Glu Arg Val  
705 710 715 720  
Gly Cys Asp Asn Val Leu Gly Ser Asp Ala Val Glu Asp Val Cys Gly  
725 730 735  
Val Cys Asn Gly Asn Asn Ser Ala Cys Thr Ile His Arg Gly Leu Tyr  
740 745 750  
Thr Lys His His His Thr Asn Gln Tyr Tyr His Met Val Thr Ile Pro  
755 760 765  
Ser Gly Ala Arg Ser Ile Arg Ile Tyr Glu Met Asn Val Ser Thr Ser  
770 775 780  
Tyr Ile Ser Val Arg Asn Ala Leu Arg Arg Tyr Tyr Leu Asn Gly His  
785 790 795 800  
Trp Thr Val Asp Trp Pro Gly Arg Tyr Lys Phe Ser Gly Thr Thr Phe  
805 810 815  
Asp Tyr Arg Arg Ser Tyr Asn Glu Pro Glu Asn Leu Ile Ala Thr Gly  
820 825 830

Pro Thr Asn Glu Thr Leu Ile Val Glu Leu Leu Phe Gln Gly Arg Asn

835

840

845

Pro Gly Val Ala Trp Glu Tyr Ser Met Pro Arg Leu Gly Thr Glu Lys

850

855

860

Gln Pro Pro Ala Gln Pro Ser Tyr Thr Trp Ala Ile Val Arg Ser Glu

865

870

875

880

Cys Ser Val Ser Cys Gly Gly Gly Gln Met Thr Val Arg Glu Gly Cys

885

890

895

Tyr Arg Asp Phe Leu Tyr Phe Met Phe Tyr Leu Ser Gln Leu Phe Ala

900

905

910

Ser Glu Cys Pro Phe Lys Asn Thr Leu Leu His Ala Phe Leu Cys Lys

915

920

925

<210> 3010

<211> 492

<212> PRT

<213> Homo sapiens

<400> 3010

Met Cys Ala Gly Arg Thr Ala Ala Gly Gly Ser Phe Gln Arg Arg Ala

1

5

10

15

Leu Trp Val Leu Ala Phe Cys Thr Ser Phe Gly Leu Leu Leu Ser Trp

20

25

30

Ser Ser Asn Arg Leu Leu Tyr Trp Leu Ser Phe Pro Ser His Thr Arg

35

40

45

Val His Arg Glu Trp Ser Arg Gln Leu Pro Phe Pro Ala Val Thr Val

50

55

60

Cys Asn Asn Asn Pro Leu Arg Phe Pro Arg Leu Ser Lys Gly Asp Leu



出証特 2 0 0 4 - 3 0 5 9 6 6 1

Val His Met Pro Gly Asp Ala Pro Phe Cys Thr Pro Glu Gln His Lys  
305 310 315 320  
Glu Cys Ala Glu Pro Ala Leu Gly Leu Leu Ala Glu Lys Asp Ser Asn  
325 330 335  
Tyr Cys Leu Cys Arg Thr Pro Cys Asn Leu Thr Arg Tyr Asn Lys Glu  
340 345 350  
Leu Ser Met Val Lys Ile Pro Ser Lys Thr Ser Ala Lys Tyr Leu Glu  
355 360 365  
Lys Lys Phe Asn Lys Ser Glu Lys Tyr Ile Ser Glu Asn Ile Leu Val  
370 375 380  
Leu Asp Ile Phe Phe Glu Ala Leu Asn Tyr Glu Thr Ile Glu Gln Lys  
385 390 395 400  
Lys Ala Tyr Glu Val Ala Ala Leu Leu Gly Asp Ile Gly Gly Gln Met  
405 410 415  
Gly Leu Phe Ile Gly Ala Ser Ile Leu Thr Ile Leu Glu Leu Phe Asp  
420 425 430  
Tyr Ile Tyr Glu Leu Ile Lys Glu Lys Leu Leu Asp Leu Leu Gly Lys  
435 440 445  
Glu Glu Asp Glu Gly Ser His Asp Glu Asn Val Ser Thr Cys Asp Thr  
450 455 460  
Met Pro Asn His Ser Glu Thr Ile Ser His Thr Val Asn Val Pro Leu  
465 470 475 480  
Gln Thr Thr Leu Gly Thr Leu Glu Glu Ile Ala Cys  
485 490

&lt;210&gt; 3011

&lt;211&gt; 460

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3011

Met Ile Ala Lys Glu Glu Leu Glu Ser Val Leu Glu Glu Glu Val Asp  
1 5 10 15  
Asp Phe Pro Thr Phe Gly Asp Ser Gln Ser Asp Tyr Asp Thr Val Val  
20 25 30  
His Pro Phe Tyr Ala Tyr Trp Gln Ser Phe Cys Thr Gln Lys Asn Phe  
35 40 45  
Ala Trp Lys Glu Glu Tyr Asp Thr Arg Gln Ala Ser Asn Arg Trp Glu  
50 55 60  
Lys Arg Ala Met Glu Lys Glu Asn Lys Lys Ile Arg Asp Lys Ala Arg  
65 70 75 80  
Lys Glu Lys Asn Glu Leu Val Arg Gln Leu Val Ala Phe Ile Arg Lys  
85 90 95  
Arg Asp Lys Arg Val Gln Ala His Arg Lys Leu Val Glu Glu Gln Asn  
100 105 110  
Ala Glu Lys Ala Arg Lys Ala Glu Glu Met Arg Arg Gln Gln Lys Leu  
115 120 125  
Lys Gln Ala Lys Leu Val Glu Gln Tyr Arg Glu Gln Ser Trp Met Thr  
130 135 140  
Met Ala Asn Leu Glu Lys Glu Leu Gln Glu Met Glu Ala Arg Tyr Glu  
145 150 155 160  
Lys Glu Phe Gly Asp Gly Ser Asp Glu Asn Glu Met Glu Glu His Glu  
165 170 175  
Leu Lys Asp Glu Glu Asp Gly Lys Asp Ser Asp Glu Ala Glu Asp Ala  
180 185 190  
Glu Leu Tyr Asp Asp Leu Tyr Cys Pro Ala Cys Asp Lys Ser Phe Lys  
195 200 205

Thr Glu Lys Ala Met Lys Asn His Glu Lys Ser Lys Lys His Arg Glu  
 210 215 220  
 Met Val Ala Leu Leu Lys Gln Gln Leu Glu Glu Glu Glu Glu Asn Phe  
 225 230 235 240  
 Ser Arg Pro Gln Ile Asp Glu Asn Pro Leu Asp Asp Asn Ser Glu Glu  
 245 250 255  
 Glu Met Glu Asp Ala Pro Lys Gln Lys Leu Ser Lys Lys Gln Lys Lys  
 260 265 270  
 Lys Lys Gln Lys Pro Ala Gln Asp Val Pro Gly Lys Asp Ser Tyr Leu  
 275 280 285  
 Pro Ala Ala His Phe Gln Met Ala Trp Gly Lys Lys Cys Val Leu Gly  
 290 295 300  
 Glu Arg Arg Asp Gly Glu Ser Glu His Lys Cys Ala Lys Met Leu Leu  
 305 310 315 320  
 Glu Asn Arg Gln Asn Tyr Asp Asp Asn Phe Asn Val Asn Gly Pro Gly  
 325 330 335  
 Glu Gly Val Lys Val Asp Pro Glu Asp Thr Asn Leu Asn Gln Asp Ser  
 340 345 350  
 Ala Lys Glu Leu Glu Asp Ser Pro Gln Glu Asn Val Ser Val Thr Glu  
 355 360 365  
 Ile Ile Lys Pro Cys Asp Asp Pro Lys Ser Glu Ala Lys Ser Val Pro  
 370 375 380  
 Lys Pro Lys Gly Lys Lys Thr Lys Asp Met Lys Lys Pro Val Arg Val  
 385 390 395 400  
 Pro Ala Glu Pro Gln Thr Met Ser Val Leu Ile Ser Cys Thr Thr Cys  
 405 410 415  
 His Ser Glu Phe Pro Ser Arg Asn Lys Leu Phe Asp His Leu Lys Ala  
 420 425 430  
 Thr Gly His Ala Arg Ala Pro Ser Ser Ser Ser Leu Asn Ser Ala Thr

435 440 445  
Ser Ser Gln Ser Lys Lys Glu Lys Arg Lys Asn Arg  
450 455 460

<210> 3012

<211> 544

<212> PRT

<213> Homo sapiens

<400> 3012

Met Thr Phe Glu Asp Val Ala Val Tyr Phe Ser Gln Glu Glu Trp Gly  
1 5 10 15  
Leu Leu Asp Thr Ala Gln Arg Ala Leu Tyr Arg His Val Met Leu Glu  
20 25 30  
Asn Phe Thr Leu Val Thr Ser Leu Gly Leu Ser Thr Ser Arg Pro Arg  
35 40 45  
Val Val Ile Gln Leu Glu Arg Gly Glu Glu Pro Trp Val Pro Ser Gly  
50 55 60  
Lys Asp Met Thr Leu Ala Arg Asn Thr Tyr Gly Arg Leu Asn Ser Gly  
65 70 75 80  
Ser Trp Ser Leu Thr Glu Asp Arg Asp Val Ser Gly Glu Trp Pro Arg  
85 90 95  
Ala Phe Pro Asp Thr Pro Pro Gly Met Thr Thr Ser Val Phe Pro Val  
100 105 110  
Ala Asp Ala Cys His Ser Val Lys Ser Leu Gln Arg Gln Pro Gly Ala  
115 120 125  
Ser Pro Ser Gln Glu Arg Lys Pro Thr Gly Val Ser Val Ile Tyr Trp  
130 135 140

Glu Arg Leu Leu Leu Gly Ser Arg Ser Asp Gln Ala Ser Ile Ser Leu  
145 150 155 160  
Arg Leu Thr Ser Pro Leu Arg Pro Pro Lys Ser Ser Arg Pro Arg Glu  
165 170 175  
Lys Thr Phe Thr Glu Tyr Arg Val Pro Gly Arg Gln Pro Arg Thr Pro  
180 185 190  
Glu Arg Gln Lys Pro Cys Ala Gln Glu Val Pro Gly Arg Ala Phe Gly  
195 200 205  
Asn Ala Ser Asp Leu Lys Ala Ala Ser Gly Gly Arg Asp Arg Arg Met  
210 215 220  
Gly Ala Ala Trp Gln Glu Pro His Arg Leu Leu Gly Gly Gln Glu Pro  
225 230 235 240  
Ser Thr Trp Asp Glu Leu Gly Glu Ala Leu His Ala Gly Glu Lys Ser  
245 250 255  
Phe Glu Cys Arg Ala Cys Ser Lys Val Phe Val Lys Ser Ser Asp Leu  
260 265 270  
Leu Lys His Leu Arg Thr His Thr Gly Glu Arg Pro Tyr Glu Cys Thr  
275 280 285  
Gln Cys Gly Lys Ala Phe Ser Gln Thr Ser His Leu Thr Gln His Gln  
290 295 300  
Arg Ile His Ser Gly Glu Thr Pro Tyr Ala Cys Pro Val Cys Gly Lys  
305 310 315 320  
Ala Phe Arg His Ser Ser Ser Leu Val Arg His Gln Arg Ile His Thr  
325 330 335  
Ala Glu Lys Ser Phe Arg Cys Ser Glu Cys Gly Lys Ala Phe Ser His  
340 345 350  
Gly Ser Asn Leu Ser Gln His Arg Lys Ile His Ala Gly Gly Arg Pro  
355 360 365  
Tyr Ala Cys Ala Gln Cys Gly Arg Arg Phe Cys Arg Asn Ser His Leu

370 375 380  
Ile Gln His Glu Arg Thr His Thr Gly Glu Lys Pro Phe Val Cys Ala  
385 390 395 400  
Leu Cys Gly Ala Ala Phe Ser Gln Gly Ser Ser Leu Phe Leu His Gln  
405 410 415  
Arg Val His Thr Gly Glu Lys Pro Phe Ala Cys Ala Gln Cys Gly Arg  
420 425 430  
Ser Phe Ser Arg Ser Ser Asn Leu Thr Gln His Gln Leu Leu His Thr  
435 440 445  
Gly Glu Arg Pro Phe Arg Cys Val Gly Cys Gly Lys Gly Phe Ala Lys  
450 455 460  
Gly Ala Val Leu Leu Ser His Arg Arg Ile His Thr Gly Glu Lys Pro  
465 470 475 480  
Phe Val Cys Thr Gln Cys Gly Arg Ala Phe Arg Glu Arg Pro Ala Leu  
485 490 495  
Leu His His Gln Arg Ile His Thr Thr Glu Lys Thr Asn Ala Ala Ala  
500 505 510  
Pro Asp Cys Thr Pro Gly Pro Gly Phe Leu Gln Gly His His Arg Lys  
515 520 525  
Val Arg Arg Gly Gly Lys Pro Ser Pro Val Leu Lys Pro Ala Lys Val  
530 535 540

&lt;210&gt; 3013

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3013

Met Ile Trp Met Gly Ser Phe Tyr Ala Pro Gly Leu Val Gly Ile Asn  
1 5 10 15  
Val Leu Arg Leu Leu Thr Ser Met Tyr Phe Gln Cys Trp Ala Val Met  
20 25 30  
Ser Ser Asn Val Pro His Glu Arg Val Phe Lys Ala Ser Arg Ser Asn  
35 40 45  
Asn Phe Tyr Met Gly Leu Leu Leu Leu Val Leu Phe Leu Ser Leu Leu  
50 55 60  
Pro Val Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly  
65 70 75 80  
Pro Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg  
85 90 95  
Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val Ser  
100 105 110  
Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro Met Pro  
115 120 125  
Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser Phe Cys Val  
130 135 140  
Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val Ala Val Glu Cys  
145 150 155 160  
Leu Lys

&lt;210&gt; 3014

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 3014

Met Pro Pro Ser Ile Ser Ala Phe Gln Ala Ala Tyr Ile Gly Ile Glu  
 1 5 10 15  
 Val Leu Ile Ala Leu Val Ser Val Pro Gly Asn Val Leu Val Ile Trp  
 20 25 30  
 Ala Val Lys Val Asn Gln Ala Leu Arg Asp Ala Thr Phe Cys Phe Ile  
 35 40 45  
 Val Ser Leu Ala Val Ala Asp Val Ala Val Gly Ala Leu Val Ile Pro  
 50 55 60  
 Leu Ala Ile Leu Ile Asn Ile Gly Pro Gln Thr Tyr Phe His Thr Cys  
 65 70 75 80  
 Leu Met Val Ala Cys Pro Val Leu Ile Leu Thr Gln Ser Ser Ile Leu  
 85 90 95  
 Ala Leu Leu Ala Ile Ala Val Asp Arg Tyr Leu Arg Val Lys Ile Pro  
 100 105 110  
 Leu Arg Tyr Lys Met Val Val Thr Pro Arg Arg Ala Ala Val Ala Ile  
 115 120 125  
 Ala Gly Cys Trp Ile Leu Ser Phe Val Val Gly Leu Thr Pro Met Phe  
 130 135 140  
 Gly Trp Asn Asn Leu Ser Ala Val Glu Arg Ala Trp Ala Ala Asn Gly  
 145 150 155 160  
 Ser Met Gly Glu Pro Val Ile Lys Cys Glu Phe Glu Lys Val Ile Ser  
 165 170 175  
 Met Glu Tyr Met Val Tyr Phe Asn Phe Phe Val Trp Val Leu Pro Pro  
 180 185 190  
 Leu Leu Leu Met Val Leu Ile Tyr Leu Glu Val Phe Tyr Leu Ile Arg  
 195 200 205  
 Lys Gln Leu Asn Lys Lys Val Ser Ala Ser Ser Gly Asp Pro Gln Lys  
 210 215 220

Tyr Tyr Gly Lys Glu Leu Lys Ile Ala Lys Ser Leu Ala Leu Ile Leu  
 225                      230                      235                      240  
 Phe Leu Phe Ala Leu Ser Trp Leu Pro Leu His Ile Leu Asn Cys Ile  
                          245                      250                      255  
 Thr Leu Phe Cys Pro Ser Cys His Lys Pro Ser Ile Leu Thr Tyr Ile  
                          260                      265                      270  
 Ala Ile Phe Leu Thr His Gly Asn Ser Ala Met Asn Pro Ile Val Tyr  
                          275                      280                      285  
 Ala Phe Arg Ile Gln Lys Phe Arg Val Thr Phe Leu Lys Ile Trp Asn  
                          290                      295                      300  
 Asp His Phe Arg Cys Gln Pro Ala Pro Pro Ile Asp Glu Asp Leu Pro  
 305                      310                      315                      320  
 Glu Glu Arg Pro Asp Asp  
                          325

<210> 3015

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3015

Met Arg Arg Lys Gln Lys Gln Lys Pro Leu Ile Gly Leu Ser Asp Leu  
 1                      5                      10                      15  
 Met Arg Leu Ile His Tyr His Glu Asn Ser Thr Gly Lys Thr Gly Pro  
                          20                      25                      30  
 His Asp Ser Val Thr Ser Pro Trp Val Pro Pro Met Ala Cys Gly Asn  
                          35                      40                      45  
 Ser Gly Arg Tyr Asn Ser Ser Gly Asp Leu Gly Gly Asp Thr Ala Lys

50                      55                      60  
 Pro Tyr Gln Val Leu Ile Leu Ile Leu Gln Tyr Ser Leu Leu Arg Leu  
 65                      70                      75                      80  
 Lys Ile Phe Ser Glu Glu Ser Val Pro Leu Phe Gly Pro Pro Leu Pro  
                          85                      90                      95  
 Thr Pro Pro Val Phe Thr Asp His Gln Glu Phe Arg Asp Phe Leu Leu  
                          100                      105                      110  
 Val Lys Cys Lys Phe Leu Phe  
                          115

<210> 3016

<211> 572

<212> PRT

<213> Homo sapiens

<400> 3016

Met Ser Tyr Gln Gly Lys Lys Ser Ile Pro His Ile Thr Ser Asp Arg  
 1                      5                      10                      15  
 Leu Leu Ile Lys Gly Gly Arg Ile Ile Asn Asp Asp Gln Ser Leu Tyr  
                          20                      25                      30  
 Ala Asp Val Tyr Leu Glu Asp Gly Leu Ile Lys Gln Ile Gly Glu Asn  
                          35                      40                      45  
 Leu Ile Val Pro Gly Gly Val Lys Thr Ile Glu Ala Asn Gly Arg Met  
                          50                      55                      60  
 Val Ile Pro Gly Gly Ile Asp Val Asn Thr Tyr Leu Gln Lys Pro Ser  
 65                      70                      75                      80  
 Gln Gly Met Thr Ala Ala Asp Asp Phe Phe Gln Gly Thr Arg Ala Ala  
                          85                      90                      95

Leu Val Gly Gly Thr Thr Met Ile Ile Asp His Val Val Pro Glu Pro  
100 105 110  
Gly Ser Ser Leu Leu Thr Ser Phe Glu Lys Trp His Glu Ala Ala Asp  
115 120 125  
Thr Lys Ser Cys Cys Asp Tyr Ser Leu His Val Asp Ile Thr Ser Trp  
130 135 140  
Tyr Asp Gly Val Arg Glu Glu Leu Glu Val Leu Val Gln Asp Lys Gly  
145 150 155 160  
Val Asn Ser Phe Gln Val Tyr Met Ala Tyr Lys Asp Val Tyr Gln Met  
165 170 175  
Ser Asp Ser Gln Leu Tyr Glu Ala Phe Thr Phe Leu Lys Gly Leu Gly  
180 185 190  
Ala Val Ile Leu Val His Thr Glu Asn Gly Asp Leu Ile Ala Gln Glu  
195 200 205  
Gln Lys Arg Ile Leu Glu Met Gly Ile Thr Gly Pro Glu Gly His Ala  
210 215 220  
Leu Ser Arg Pro Glu Glu Leu Glu Ala Glu Ala Val Phe Arg Ala Ile  
225 230 235 240  
Thr Ile Ala Gly Arg Ile Asn Cys Pro Val Tyr Ile Thr Lys Val Met  
245 250 255  
Ser Lys Ser Ala Ala Asp Ile Ile Ala Leu Ala Arg Lys Lys Gly Pro  
260 265 270  
Leu Val Phe Gly Glu Pro Ile Ala Ala Ser Leu Gly Thr Asp Gly Thr  
275 280 285  
His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Ala Phe Val Thr Ser  
290 295 300  
Pro Pro Leu Ser Pro Asp Pro Thr Thr Pro Asp Tyr Leu Thr Ser Leu  
305 310 315 320  
Leu Ala Cys Gly Asp Leu Gln Val Thr Gly Ser Gly His Cys Pro Tyr

325 330 335  
Ser Thr Ala Gln Lys Ala Val Gly Lys Asp Asn Phe Thr Leu Ile Pro  
340 345 350  
Glu Gly Val Asn Gly Ile Glu Glu Arg Met Thr Val Val Trp Asp Lys  
355 360 365  
Ala Val Ala Thr Gly Lys Met Asp Glu Asn Gln Phe Val Ala Val Thr  
370 375 380  
Ser Thr Asn Ala Ala Lys Ile Phe Asn Leu Tyr Pro Arg Lys Gly Arg  
385 390 395 400  
Ile Ala Val Gly Ser Asp Ala Asp Val Val Ile Trp Asp Pro Asp Lys  
405 410 415  
Leu Lys Thr Ile Thr Ala Lys Ser His Lys Ser Ala Val Glu Tyr Asn  
420 425 430  
Ile Phe Glu Gly Met Glu Cys His Gly Ser Pro Leu Val Val Ile Ser  
435 440 445  
Gln Gly Lys Ile Val Phe Glu Asp Gly Asn Ile Asn Val Asn Lys Gly  
450 455 460  
Met Gly Arg Phe Ile Pro Arg Lys Ala Phe Pro Glu His Leu Tyr Gln  
465 470 475 480  
Arg Val Lys Ile Arg Asn Lys Val Phe Gly Leu Gln Gly Val Ser Arg  
485 490 495  
Gly Met Tyr Asp Gly Pro Val Tyr Glu Val Pro Ala Thr Pro Lys Tyr  
500 505 510  
Ala Thr Pro Ala Pro Ser Ala Lys Ser Ser Pro Ser Lys His Gln Pro  
515 520 525  
Pro Pro Ile Arg Asn Leu His Gln Ser Asn Phe Ser Leu Ser Gly Ala  
530 535 540  
Gln Ile Asp Asp Asn Asn Pro Arg Arg Thr Gly His Arg Ile Val Ala  
545 550 555 560

Pro Pro Gly Gly Arg Ser Asn Ile Thr Ser Leu Gly

565

570

<210> 3017

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3017

Met Ile Ala Tyr Ser Leu Phe Ser Cys Leu Arg Gln Ser Leu Thr Leu

1

5

10

15

Leu Pro Arg Leu Glu Cys Ser Gly Thr Ile Leu Ala His Cys Asn Leu

20

25

30

His Leu Pro Val Ser Ser Ser Ser Arg Ala Ser Val Ser Gln Val Ala

35

40

45

Gly Thr Thr Gly Thr His His His Thr Gln Leu Thr Phe Val Phe Leu

50

55

60

Val Glu Thr Gly Phe Cys Arg Phe Gly Gln Thr Ser Leu Glu Leu Leu

65

70

75

80

Thr Ser Arg Gln Arg Leu Gly Ile Ala Val Cys Asp Ser Arg Ile Pro

85

90

95

Ser Gly Arg Leu Leu Gln Cys Ala Leu Ser Ala Leu Pro Ser Ala Glu

100

105

110

Gly Leu Cys

115

<210> 3018

&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3018

Met Gly Gln Gly Leu Gly Glu Gly Val Pro Gly Gln His Ala Ile Arg

1 5 10 15

Glu Arg Glu Glu Gln Arg Ala Pro Ala Gly Thr Pro Ala Leu Gly Gln

20 25 30

Ala Ala Pro Gln His Gly His Gln Asp Gln Pro Ile Gly Cys His Arg

35 40 45

Gln Asp His Ile Arg Leu Glu Val Leu Glu His Lys Ala Glu Val Gly

50 55 60

Ala Arg Gly Gln Asp Asp Glu Gln Gln Gln Ala Gly Leu Gln Gly Arg

65 70 75 80

Glu Ala Glu Gly Pro Asp Val Glu Glu Val Gly Gly Gly Lys Gly Gly

85 90 95

His Ala Trp Arg Glu Arg Gly Gly Val Pro Val Arg Lys Ala His Pro

100 105 110

Gly Asn Gly Pro Glu Val Thr Pro Gln Gly Leu Arg Glu Gly Pro Ser

115 120 125

Gln Ser Thr Arg Pro His Pro Gly Arg Ala Ser Leu Gln Val Ser Pro

130 135 140

His Ala Val Ser Ile Leu Ala Leu Leu Arg Thr Ala Arg Arg Pro His

145 150 155 160

Leu Pro Leu Ala Ser Lys Ala Pro Trp Pro Pro Ala Leu Gln Pro Leu

165 170 175

Cys Ala Ser His Pro Gly Leu Leu Gly Tyr Lys His Leu Thr Arg Pro

180 185 190

Cys Pro Gly Ala Phe Thr Leu Ala Leu Pro Pro His Arg His Thr Ala  
195 200 205  
Leu Gln Leu Cys Pro Asn Val Thr Ser Ser Val Arg Pro Ser Ser Ala  
210 215 220  
Thr Leu Leu Gln Thr Ala Val Pro Pro Ala Gly Pro His Cys Pro Leu  
225 230 235 240  
Arg His Leu Ser Tyr Cys Pro Asn Thr Ala Cys Pro His Pro Ser Leu  
245 250 255  
Glu Arg Glu Leu Pro Arg Ser Arg Leu Arg Pro Pro Leu Cys Leu  
260 265 270

&lt;210&gt; 3019

&lt;211&gt; 725

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3019

Met Pro Pro Phe Leu Leu Leu Glu Thr Val Cys Val Phe Leu Phe Ser  
1 5 10 15  
Arg Val Pro Pro Ser Leu Pro Leu Gln Glu Val His Val Ser Lys Glu  
20 25 30  
Thr Ile Gly Lys Ile Ser Ala Ala Ser Lys Met Met Trp Cys Ser Ala  
35 40 45  
Ala Val Asp Ile Met Phe Leu Leu Asp Gly Ser Asn Ser Val Gly Lys  
50 55 60  
Gly Ser Phe Glu Arg Ser Lys His Phe Ala Ile Ala Val Cys Asp Gly  
65 70 75 80  
Leu Asp Ile Ser Pro Glu Arg Val Arg Val Gly Ala Phe Gln Phe Ser



	85		90		95
Ser Thr Pro His Leu Glu Phe Pro Leu Asp Ser Phe Ser Thr Gln Gln					
	100		105		110
Glu Val Lys Ala Arg Ile Lys Arg Met Val Phe Lys Gly Gly Arg Thr					
	115		120		125
Glu Thr Gly Leu Ala Leu Lys Tyr Leu Leu His Arg Gly Leu Pro Gly					
	130		135		140
Gly Arg Asn Ala Ser Val Pro Gln Ile Leu Ile Ile Val Thr Asp Gly					
145		150		155	160
Lys Ser Gln Gly Asp Val Ala Leu Pro Ser Lys Gln Leu Lys Glu Arg					
	165		170		175
Gly Val Thr Val Phe Ala Val Gly Val Arg Phe Pro Arg Trp Glu Glu					
	180		185		190
Leu His Ala Leu Ala Ser Glu Pro Arg Gly Gln His Val Leu Leu Ala					
	195		200		205
Glu Gln Val Glu Asp Ala Thr Asn Gly Leu Phe Ser Thr Leu Ser Ser					
	210		215		220
Ser Ala Ile Cys Ser Ser Ala Thr Pro Asp Cys Arg Val Glu Ala His					
225		230		235	240
Pro Cys Glu His Arg Thr Leu Glu Met Val Arg Glu Phe Ala Gly Asn					
	245		250		255
Ala Pro Cys Trp Arg Gly Ser Arg Arg Thr Leu Ala Val Leu Ala Ala					
	260		265		270
His Cys Pro Phe Tyr Ser Trp Lys Arg Val Phe Leu Thr His Pro Ala					
	275		280		285
Thr Cys Tyr Arg Thr Thr Cys Pro Gly Pro Cys Asp Ser Gln Pro Cys					
	290		295		300
Gln Asn Gly Gly Thr Cys Val Pro Glu Gly Leu Asp Gly Tyr Gln Cys					
305		310		315	320

Leu Cys Pro Leu Ala Phe Gly Gly Glu Ala Asn Cys Ala Leu Lys Leu  
325 330 335  
Ser Leu Glu Cys Arg Val Asp Leu Leu Phe Leu Leu Asp Ser Ser Ala  
340 345 350  
Gly Thr Thr Leu Asp Gly Phe Leu Arg Ala Lys Val Phe Val Lys Arg  
355 360 365  
Phe Val Arg Ala Val Leu Ser Glu Asp Ser Arg Ala Arg Val Gly Val  
370 375 380  
Ala Thr Tyr Ser Arg Glu Leu Leu Val Ala Val Pro Val Gly Glu Tyr  
385 390 395 400  
Gln Asp Val Pro Asp Leu Val Trp Ser Leu Asp Gly Ile Pro Phe Arg  
405 410 415  
Gly Gly Pro Thr Leu Thr Gly Ser Ala Leu Arg Gln Ala Ala Glu Arg  
420 425 430  
Gly Phe Gly Ser Ala Thr Arg Thr Gly Gln Asp Arg Pro Arg Arg Val  
435 440 445  
Val Val Leu Leu Thr Glu Ser His Ser Glu Asp Glu Val Ala Gly Pro  
450 455 460  
Ala Arg His Ala Arg Ala Arg Glu Leu Leu Leu Leu Gly Val Gly Ser  
465 470 475 480  
Glu Ala Val Arg Ala Glu Leu Glu Glu Ile Thr Gly Ser Pro Lys His  
485 490 495  
Val Met Val Tyr Ser Asp Pro Gln Asp Leu Phe Asn Gln Ile Pro Glu  
500 505 510  
Leu Gln Gly Lys Leu Cys Ser Arg Gln Arg Pro Gly Cys Arg Thr Gln  
515 520 525  
Ala Leu Asp Leu Val Phe Met Leu Asp Thr Ser Ala Ser Val Gly Pro  
530 535 540  
Glu Asn Phe Ala Gln Met Gln Ser Phe Val Arg Ser Cys Ala Leu Gln

545                      550                      555                      560  
Phe Glu Val Asn Pro Asp Val Thr Gln Val Gly Leu Val Val Tyr Gly  
                         565                      570                      575  
Ser Gln Val Gln Thr Ala Phe Gly Leu Asp Thr Lys Pro Thr Arg Ala  
                         580                      585                      590  
Ala Met Leu Arg Ala Ile Ser Gln Ala Pro Tyr Leu Gly Gly Val Gly  
                         595                      600                      605  
Ser Ala Gly Thr Ala Leu Leu His Ile Tyr Asp Lys Val Met Thr Val  
                         610                      615                      620  
Gln Arg Gly Ala Arg Pro Gly Val Pro Lys Ala Val Val Val Leu Thr  
625                      630                      635                      640  
Gly Gly Arg Gly Ala Glu Asp Ala Ala Val Pro Ala Gln Lys Leu Arg  
                         645                      650                      655  
Asn Asn Gly Ile Ser Val Leu Val Val Gly Val Gly Pro Val Leu Ser  
                         660                      665                      670  
Glu Gly Leu Arg Arg Leu Ala Gly Pro Arg Asp Ser Leu Ile His Val  
                         675                      680                      685  
Ala Ala Tyr Ala Asp Leu Arg Tyr His Gln Asp Val Leu Ile Glu Trp  
                         690                      695                      700  
Leu Cys Gly Gly Glu Trp Gly Asn Pro His Pro Gln Gly Cys Pro His  
705                      710                      715                      720  
Gly Arg Pro Ser Ala  
                         725

&lt;210&gt; 3020

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3020

Met Ala Val Leu Ser Ala Pro Gly Leu Arg Gly Phe Arg Ile Leu Gly  
1 5 10 15  
Leu Arg Ser Ser Val Gly Pro Ala Val Gln Ala Arg Gly Val His Gln  
20 25 30  
Ser Val Ala Thr Asp Gly Pro Ser Ser Thr Gln Pro Ala Leu Pro Lys  
35 40 45  
Ala Arg Ala Val Ala Pro Lys Pro Ser Ser Arg Gly Glu Tyr Val Val  
50 55 60  
Ala Lys Leu Asp Asp Leu Val Asn Trp Ala Arg Arg Val Ser Thr Met  
65 70 75 80  
Ser Cys Arg Pro Ser Ser Ser Ala Arg Ala Ser Leu His Thr His Arg  
85 90 95  
His Thr His Thr His Thr Asn Val Gln Thr Arg Thr His Thr Thr His  
100 105 110  
Ala Cys Thr Leu Thr Cys Ala His Val His Ala Ser Ser His Val Trp  
115 120 125  
Thr Asp Val Tyr Thr Asp His Thr His Thr His Ala His Asn Ala His  
130 135 140  
Met His Thr Arg Thr His Ala His Leu His Thr His Ala His Thr Ser  
145 150 155 160  
Thr Cys Ala His Thr Leu Ala His Ile His Thr Cys Thr Leu Ala Leu  
165 170 175  
Met His Thr His Ala His Ile Tyr Thr Cys Thr Arg Thr Leu Ala His  
180 185 190  
Thr Cys Thr Tyr Met His Ser His Ala His Thr Cys Thr Leu Thr His  
195 200 205  
Met His Thr Arg Pro Cys Val Asp Thr Cys Met Cys Ala Cys Trp His

210                      215                      220  
 Ala Cys Thr Gln Ala His Ser Leu Met His Thr His Pro Cys Gly Arg  
 225                      230                      235                      240  
 Gly Ala Gly Arg Thr Leu Pro Glu Ala Pro Val Leu Ala Trp Trp Pro  
                     245                      250                      255  
 Val Val Pro Ser Glu Asp Ser Asp Pro Ala Gly Asp Asp Pro Ser Val  
                     260                      265                      270  
 Ser Val Ile Leu Phe Leu Ala Ser Val Cys Ser Ser Cys Phe Ser Phe  
                     275                      280                      285  
 Lys Val Lys Ala Val Phe  
                     290

<210> 3021

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3021

Met Ser Pro Lys Pro Trp Gln Leu Pro Cys Gly Val Lys Pro Val Gly  
                     1                      5                      10                      15  
 Ala Gln Glu Ser Ala Met Arg Phe Leu Asn Leu Cys Leu Asp Phe Arg  
                     20                      25                      30  
 Gly Tyr Met Glu Thr Pro Gly Cys Pro Gly Arg Ser Leu Leu Pro Glu  
                     35                      40                      45  
 Glu Ser Pro His Gly Glu Pro Leu Leu Gly Gln Cys Gly Lys Glu Met  
                     50                      55                      60  
 Trp Gly Trp Ser Pro His Thr Leu Ser Pro Leu Gly His Cys Leu Val  
                     65                      70                      75                      80

Glu Leu Cys Lys Glu Asp Tyr His Pro Pro Asp Pro Arg Met Val Asp  
                     85                    90                    95  
 Pro Met Thr Ala Cys Thr Met Ser Leu Glu Lys Leu Gln Thr Leu Asn  
                     100                    105                    110  
 Thr Ser Ser  
                     115

<210> 3022

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3022

Met Asn Ile Ser Leu Ala Phe Gly Arg Arg Ala Gly Glu Gly Tyr Asp  
     1                    5                    10                    15  
 Gly Ser Gln His Ala Pro Gly Ser Glu Glu Ala Tyr Ser Ala Asp Gly  
                     20                    25                    30  
 Arg Arg Ile Gly Ile Lys Asn Ala Leu Leu Leu Gln Gly His Pro Ile  
                     35                    40                    45  
 Ser His Gly Thr Pro Lys Asn Pro Ser Leu Ser Phe Cys Pro Cys Gly  
                     50                    55                    60  
 Gln Leu Phe Glu Asn Pro Ser Leu Ser Cys Arg Pro Cys Gly Gln Leu  
     65                    70                    75                    80  
 Phe Glu Trp Glu Ala Ala Gln Met Met Gly Leu Asn Met Thr Leu Pro  
                     85                    90                    95  
 Ser Arg Trp Gln Glu Tyr Gly Pro Pro Asn Arg Asp Ala Leu Leu Phe  
                     100                    105                    110  
 Ile Ser Gly Pro Leu Gln Ala Ile Glu Ser Trp Pro

115

120

&lt;210&gt; 3023

&lt;211&gt; 846

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3023

Met Ser Asn Asp Cys Ile Ser Val Gln Ala Thr Thr Glu Glu Asn Val

1 5 10 15

Lys His Asn Glu Ala Ser Thr Thr Glu Val Glu Asn Lys Asn Gly Pro

20 25 30

Glu Thr Leu Ala Pro Ser Asn Thr Glu Glu Val Asn Ile Thr Ile His

35 40 45

Lys Lys Thr Asn Phe Cys Lys Arg Gln Cys Glu Pro Phe Val Pro Val

50 55 60

Leu Asn Lys His Arg Ser Thr Val Leu Gln Trp Pro Ser Glu Met Leu

65 70 75 80

Val Tyr Thr Thr Thr Lys Pro Ser Ile Ser Tyr Ser Cys Asn Pro Leu

85 90 95

Cys Phe Asp Phe Lys Ser Thr Lys Val Asn Asn Asn Leu Asp Lys Asn

100 105 110

Lys Pro Asp Leu Lys Asp Leu Cys Ser Gln Gln Lys Gln Glu Asp Ile

115 120 125

Cys Met Gly Pro Leu Ser Asp Tyr Lys Asp Val Ser Thr Glu Gly Leu

130 135 140

Thr Asp Tyr Glu Ile Gly Ser Ser Lys Asn Lys Cys Ser Gln Val Thr

145 150 155 160

Pro Leu Leu Ala Asp Asp Ile Leu Ser Ser Ser Cys Asp Ser Gly Lys  
165 170 175  
Asn Lys Asn Thr Gly Gln Arg Tyr Lys Asn Ile Ser Cys Lys Ile Arg  
180 185 190  
Glu Thr Glu Lys Tyr Asn Phe Thr Lys Ser Gln Ile Lys Gln Asp Thr  
195 200 205  
Leu Asp Glu Lys Tyr Asn Lys Ile Arg Leu Lys Glu Thr His Glu Tyr  
210 215 220  
Trp Phe His Lys Ser Arg Arg Lys Lys Lys Arg Lys Lys Leu Cys Gln  
225 230 235 240  
His His His Met Glu Lys Thr Lys Glu Ser Glu Thr Arg Cys Lys Met  
245 250 255  
Glu Ala Glu Asn Ser Tyr Thr Glu Asn Ala Gly Lys Tyr Leu Leu Glu  
260 265 270  
Pro Ile Ser Glu Lys Gln Tyr Leu Ala Ala Glu Gln Leu Leu Asp Ser  
275 280 285  
His Gln Leu Leu Asp Lys Arg Pro Lys Ser Glu Ser Ile Ser Leu Ser  
290 295 300  
Asp Asn Glu Glu Met Cys Lys Thr Trp Asn Thr Glu Tyr Asn Thr Tyr  
305 310 315 320  
Asp Thr Ile Ser Ser Lys Asn His Cys Lys Lys Asn Thr Thr Ile Leu  
325 330 335  
Leu Asn Gly Gln Ser Asn Ala Lys Met Ile His Ser Gly Lys His Asn  
340 345 350  
Leu Thr Tyr Ser Arg Thr Tyr Cys Cys Trp Lys Thr Lys Met Ser Ser  
355 360 365  
Cys Ser Gln Asp His Arg Ser Leu Val Leu Gln Asn Asp Met Lys Arg  
370 375 380  
Met Ser Gln Asn Gln Ala Val Lys Arg Gly Tyr Asn Ser Val Met Asn



385                      390                      395                      400  
Glu Ser Glu Arg Phe Tyr Arg Lys Arg Arg Gln His Ser His Ser Tyr  
                         405                      410                      415  
Ser Ser Asp Glu Ser Leu Asn Arg Gln Asn His Leu Pro Glu Glu Phe  
                         420                      425                      430  
Leu Arg Pro Pro Ser Thr Ser Val Ala Pro Cys Lys Pro Lys Lys Lys  
                         435                      440                      445  
Arg Arg Arg Lys Arg Gly Arg Phe His Pro Gly Phe Glu Thr Leu Glu  
                         450                      455                      460  
Leu Lys Glu Asn Thr Asp Tyr Pro Val Lys Asp Asn Ser Ser Leu Asn  
465                      470                      475                      480  
Pro Leu Asp Arg Leu Ile Ser Glu Asp Lys Lys Glu Lys Met Lys Pro  
                         485                      490                      495  
Gln Glu Val Ala Lys Ile Glu Arg Asn Ser Glu Gln Thr Asn Gln Leu  
                         500                      505                      510  
Arg Asp Lys Leu Ser Phe His Pro Asn Asn Leu Leu Pro Ser Glu Thr  
                         515                      520                      525  
Asn Gly Glu Thr Glu His Leu Glu Met Glu Thr Thr Ser Gly Glu Leu  
                         530                      535                      540  
Ser Asp Val Ser Asn Asp Pro Thr Thr Ser Val Cys Val Ala Ser Ala  
545                      550                      555                      560  
Pro Thr Lys Glu Ala Ile Asp Asn Thr Leu Leu Glu His Lys Glu Arg  
                         565                      570                      575  
Ser Glu Asn Ile Asn Leu Asn Glu Lys Gln Ile Pro Phe Gln Val Pro  
                         580                      585                      590  
Asn Ile Glu Arg Asn Phe Arg Gln Ser Gln Pro Lys Ser Tyr Leu Cys  
                         595                      600                      605  
His Tyr Glu Leu Ala Glu Ala Leu Pro Gln Gly Lys Met Asn Glu Thr  
                         610                      615                      620

Pro Thr Glu Trp Leu Arg Tyr Asn Ser Gly Ile Leu Asn Thr Gln Pro  
625 630 635 640  
Pro Leu Pro Phe Lys Glu Ala His Val Ser Gly His Thr Phe Val Thr  
645 650 655  
Ala Glu Gln Ile Leu Ala Pro Leu Ala Leu Pro Glu Gln Ala Leu Leu  
660 665 670  
Ile Pro Leu Glu Asn His Asp Lys Phe Lys Asn Val Pro Cys Glu Val  
675 680 685  
Tyr Gln His Ile Leu Gln Pro Asn Met Leu Ala Asn Lys Val Lys Phe  
690 695 700  
Thr Phe Pro Pro Ala Ala Leu Pro Pro Pro Ser Thr Pro Val Gln Pro  
705 710 715 720  
Leu Pro Leu Gln Gln Ser Leu Cys Ser Thr Ser Val Thr Thr Ile His  
725 730 735  
His Thr Val Leu Gln Gln His Ala Ala Ala Ala Ala Ala Ala Ala Ala  
740 745 750  
Ala Ala Ala Ala Gly Thr Phe Lys Val Leu Gln Pro His Gln Gln Phe  
755 760 765  
Leu Ser Gln Ile Pro Ala Leu Thr Arg Thr Ser Leu Pro Gln Leu Ser  
770 775 780  
Val Gly Pro Val Gly Pro Arg Leu Cys Pro Gly Asn Gln Pro Thr Phe  
785 790 795 800  
Val Ala Pro Pro Gln Met Pro Ile Ile Pro Ala Ser Val Leu His Pro  
805 810 815  
Ser His Leu Ala Phe Pro Ser Leu Pro His Ala Leu Phe Pro Ser Leu  
820 825 830  
Leu Ser Pro His Pro Thr Val Ile Pro Leu Gln Pro Leu Phe  
835 840 845

&lt;210&gt; 3024

&lt;211&gt; 609

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3024

Met Trp Ser Pro Gln Asp Arg Lys Tyr Asn Ser Pro Pro Thr Gln Leu

1 5 10 15

Ser Leu Lys Pro Asn Ser Gln Ser Leu Arg Ser Gly Asn Trp Ser Glu

20 25 30

Arg Lys Ser His Arg Leu Pro Arg Leu Pro Lys Arg His Ser His Asp

35 40 45

Asp Met Leu Leu Leu Ala Gln Leu Ser Leu Pro Ser Ser Pro Ser Ser

50 55 60

Leu Asn Glu Asp Ser Leu Ser Thr Thr Ser Glu Leu Leu Ser Ser Arg

65 70 75 80

Arg Ala Arg Arg Ile Pro Lys Leu Val Gln Arg Ile Asn Ser Ile Tyr

85 90 95

Asn Ala Lys Arg Gly Lys Lys Arg Leu Lys Lys Leu Ser Met Ser Ser

100 105 110

Ile Glu Thr Ala Ser Leu Arg Asp Glu Asn Ser Glu Ser Glu Ser Asp

115 120 125

Ser Asp Asp Arg Phe Lys Ala His Thr Gln Arg Leu Val His Ile Gln

130 135 140

Ser Met Leu Lys Arg Ala Pro Ser Tyr Arg Thr Leu Glu Leu Glu Leu

145 150 155 160

Leu Glu Trp Gln Glu Arg Glu Leu Phe Glu Tyr Phe Val Val Val Ser

165 170 175

Leu Lys Lys Lys Pro Ser Arg Asn Thr Tyr Leu Pro Glu Val Ser Tyr  
180 185 190  
Gln Phe Pro Lys Leu Asp Arg Pro Thr Lys Gln Met Arg Glu Ala Glu  
195 200 205  
Glu Arg Leu Lys Ala Ile Pro Gln Phe Cys Phe Pro Asp Ala Lys Asp  
210 215 220  
Trp Leu Pro Val Ser Glu Tyr Ser Ser Glu Thr Phe Ser Phe Met Leu  
225 230 235 240  
Thr Gly Glu Asp Gly Ser Arg Arg Phe Gly Tyr Cys Arg Arg Leu Leu  
245 250 255  
Pro Ser Gly Lys Gly Pro Arg Leu Pro Glu Val Tyr Cys Val Ile Ser  
260 265 270  
Arg Leu Gly Cys Phe Gly Leu Phe Ser Lys Val Leu Asp Glu Val Glu  
275 280 285  
Arg Arg Arg Gly Ile Ser Ala Ala Leu Val Tyr Pro Phe Met Arg Ser  
290 295 300  
Leu Met Glu Ser Pro Phe Pro Ala Pro Gly Lys Thr Ile Lys Val Lys  
305 310 315 320  
Thr Phe Leu Pro Gly Ala Gly Asn Glu Val Leu Glu Leu Arg Arg Pro  
325 330 335  
Met Asp Ser Arg Leu Glu His Val Asp Phe Glu Cys Leu Phe Thr Cys  
340 345 350  
Leu Ser Val Arg Gln Leu Ile Arg Ile Phe Ala Ser Leu Leu Leu Glu  
355 360 365  
Arg Arg Val Ile Phe Val Ala Asp Lys Leu Ser Thr Leu Ser Ser Cys  
370 375 380  
Ser His Ala Val Val Ala Leu Leu Tyr Pro Phe Ser Trp Gln His Thr  
385 390 395 400  
Phe Ile Pro Val Leu Pro Ala Ser Met Ile Asp Ile Val Cys Cys Pro

405	410	415	
Thr Pro Phe Leu Val Gly Leu Leu Ser Ser Ser Leu Pro Lys Leu Lys			
420	425	430	
Glu Leu Pro Val Glu Glu Ala Leu Met Val Asn Leu Gly Ser Asp Arg			
435	440	445	
Phe Ile Arg Gln Met Asp Asp Glu Asp Thr Leu Leu Pro Arg Lys Leu			
450	455	460	
Gln Ala Ala Leu Glu Gln Ala Leu Glu Arg Lys Asn Glu Leu Ile Ser			
465	470	475	480
Gln Asp Ser Asp Ser Asp Ser Asp Asp Glu Cys Asn Thr Leu Asn Gly			
485	490	495	
Leu Val Ser Glu Val Phe Ile Arg Phe Phe Val Glu Thr Val Gly His			
500	505	510	
Tyr Ser Leu Phe Leu Thr Gln Ser Glu Lys Gly Glu Arg Ala Phe Gln			
515	520	525	
Arg Glu Ala Phe Arg Lys Ser Val Ala Ser Lys Ser Ile Arg Arg Phe			
530	535	540	
Leu Glu Val Phe Met Glu Ser Gln Met Phe Ala Gly Phe Ile Gln Asp			
545	550	555	560
Arg Glu Leu Arg Lys Cys Arg Ala Lys Gly Leu Phe Glu Gln Arg Val			
565	570	575	
Glu Gln Tyr Leu Glu Glu Leu Pro Asp Thr Glu Gln Ser Gly Met Asn			
580	585	590	
Lys Phe Leu Arg Gly Leu Gly Asn Lys Met Lys Phe Leu His Lys Lys			
595	600	605	
Asn			

&lt;210&gt; 3025

&lt;211&gt; 476

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3025

Met Leu Glu Asn Leu Thr Leu Ile Ser Ser Leu Gly Cys Trp Tyr Gly

1 5 10 15

Ala Lys Asp Glu Thr Pro Ser Lys Gln Thr Leu Ser Ile Gln Gln Glu

20 25 30

Ser Pro Leu Arg Thr His Trp Thr Gly Val Cys Thr Lys Lys Val His

35 40 45

Leu Trp Gly Met Cys Gly Pro Leu Leu Gly Asp Ile Leu His Gln Gly

50 55 60

Thr Gln His Asn Gln Lys Leu Asn Gly Phe Gly Ala Tyr Glu Lys Lys

65 70 75 80

Leu Asp Asp Asp Ala Asn His His Gln Asp Gln Lys Gln His Ile Gly

85 90 95

Glu Lys Ser Tyr Arg Ser Asn Ala Lys Gly Thr Ser Phe Val Lys Asn

100 105 110

Cys Lys Phe His Met Ser His Glu Pro Phe Ile Phe His Glu Val Gly

115 120 125

Lys Asp Phe Leu Ser Ser Leu Arg Leu Leu Gln Gln Glu Asp Ile His

130 135 140

Thr Ser Gly Lys Ser Asn Phe Glu Thr Lys His Gly Ile Pro Leu Gln

145 150 155 160

Gly Gly Lys Thr His Tyr Ile Cys Gly Glu Ser Thr Ile Pro Phe Ser

165 170 175

Asn Lys His Ser Leu Val Leu His Gln Arg Leu Leu Pro Arg Glu Gly

180	185	190
Pro Tyr Val Cys Ser Asp Ser Gly Lys Phe Thr Ser Lys Ser Asn Ser		
195	200	205
Phe Asn Asn His Gln Gly Val Arg Thr Gly Lys Arg Pro Tyr Gln Cys		
210	215	220
Gly Gln Cys Asp Glu Ser Phe Trp Tyr Lys Ala His Leu Thr Glu His		
225	230	235
Gln Arg Val His Thr Gly Glu Arg Pro Tyr Glu Cys Gly Glu Cys Asp		
245	250	255
Lys Ser Phe Ser His Lys His Ser Leu Val Asp His Gln Arg Val His		
260	265	270
Thr Gly Glu Arg Pro Tyr Glu Cys Asp Glu Cys Gly Lys Ser Phe Ser		
275	280	285
His Lys Arg Ser Leu Val His His Gln Arg Val His Thr Gly Glu Arg		
290	295	300
Pro Tyr Gln Cys Gly Glu Cys Gly Lys Ser Phe Asn His Lys Cys Asn		
305	310	315
Leu Ile Gln His Gln Arg Val His Thr Gly Glu Arg Pro Phe Glu Cys		
325	330	335
Thr Ala Cys Gly Lys Leu Phe Arg Ser Asn Ser His Leu Lys Glu His		
340	345	350
Gln Arg Val His Thr Gly Glu Arg Pro Tyr Glu Cys Lys Glu Cys Arg		
355	360	365
Lys Ser Phe Arg Tyr Lys Ser His Leu Thr Glu His Gln Arg Val His		
370	375	380
Thr Gly Glu Arg Pro Tyr Glu Cys Arg Glu Cys Gly Lys Cys Phe His		
385	390	395
Gln Lys Gly Ser Leu Ile Gln His Gln Gln Ile His Ser Gly Glu Arg		
405	410	415

<210> 3026  
<211> 184  
<212> PRT  
<213> Homo sapiens

出証特 2 0 0 4 - 3 0 5 9 6 6 1



100 105 110  
 Leu Phe Asn Ile Ala Leu Glu Val Leu Thr Arg Ala Ile Arg Gln Glu  
 115 120 125  
 Lys Glu Ile Lys Gly Ile Gln Ile Ser Lys Glu Glu Val Lys Leu Ser  
 130 135 140  
 Leu Phe Thr Asn Glu Met Ile Val Tyr Leu Glu Asn Pro Lys Asp Ser  
 145 150 155 160  
 Ser Lys Lys Leu Leu Glu Leu Ile Lys Glu Phe Ser Lys Pro Ser Gly  
 165 170 175  
 Tyr Lys Phe Asn Val Gln Asn Gln  
 180

&lt;210&gt; 3027

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3027

Met Leu Leu Arg Ile Trp Met Tyr Lys Tyr Leu Phe Lys Val Leu Leu  
 1 5 10 15  
 Ser Phe Phe Gly Tyr Met Cys Ser Ser Gly Ile Leu Gly Ser Tyr Gly  
 20 25 30  
 Leu Trp Trp Phe Phe Asp Ile Lys Asn Ile Arg Phe Phe Ser Val Phe  
 35 40 45  
 Phe Ile His Phe Ser Leu Val Phe Leu Ile Leu Asp Arg Leu Ser Asn  
 50 55 60  
 Arg Ile Phe Arg Ile Val Gly Phe Val Leu Asn Asn Ser Leu Thr Cys  
 65 70 75 80

Asp Ile Ser Ile Leu Asn Tyr His Lys Thr His Thr Arg Ser Lys Pro  
                     85                    90                    95  
 Arg Asn Asp Phe Pro Val Ser Gln Phe Arg Ala Ser Tyr Ser Tyr Asp  
                     100                    105                    110  
 His Leu Thr Leu Leu Gly Asp Lys His Val Ala Val Lys Gly Gln Ile  
                     115                    120                    125  
 Ile Leu Phe Cys Asp Lys Phe Tyr  
                     130                    135

<210> 3028

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3028

Met Ala Glu Asn Asp Val Asp Asn Glu Leu Leu Asp Tyr Glu Asp Asp  
                     1                    5                    10                    15  
 Glu Val Glu Thr Ala Ala Gly Gly Asp Gly Ala Glu Ala Pro Ala Lys  
                     20                    25                    30  
 Lys Asp Val Lys Gly Ser Tyr Val Ser Ile His Ser Ser Gly Phe Arg  
                     35                    40                    45  
 Asp Phe Leu Leu Lys Pro Glu Leu Leu Arg Ala Ile Val Asp Cys Gly  
                     50                    55                    60  
 Phe Glu His Pro Ser Glu Val Gln His Glu Cys Ile Pro Gln Ala Ile  
                     65                    70                    75                    80  
 Leu Gly Met Asp Val Leu Cys Gln Ala Lys Ser Gly Met Gly Lys Thr  
                     85                    90                    95  
 Ala Val Phe Val Leu Ala Thr Leu Gln Gln Leu Glu Pro Val Thr Gly

100 105 110  
Gln Val Ser Val Leu Val Met Cys His Thr Arg Glu Leu Ala Phe Gln  
115 120 125  
Ile Ser Lys Glu Tyr Glu Arg Phe Ser Lys Tyr Met Pro Asn Val Lys  
130 135 140  
Val Ala Val Phe Phe Gly Gly Leu Ser Ile Lys Lys Asp Glu Glu Val  
145 150 155 160  
Leu Lys Lys Asn Cys Pro His Ile Val Val Gly Thr Pro Gly Arg Ile  
165 170 175  
Leu Ala Leu Ala Arg Asn Lys Ser Leu Asn Leu Lys His Ile Lys His  
180 185 190  
Phe Ile Leu Asp Glu Cys Asp Lys Met Leu Glu Gln Leu Asp Met Arg  
195 200 205  
Arg Asp Val Gln Glu Ile Phe Arg Met Thr Pro His Glu Lys Gln Val  
210 215 220  
Met Met Phe Ser Ala Thr Leu Ser Lys Glu Ile Arg Pro Val Cys Arg  
225 230 235 240  
Lys Phe Met Gln Asp Val Asn Thr Leu Leu Pro Ser Leu Pro Pro Leu  
245 250 255  
Pro Ala Arg Cys Leu Leu Pro Phe Leu Ala Leu Phe Leu Arg Leu Pro  
260 265 270  
Cys His Ser Ser Ala Lys Lys Ala Ala Cys Ala Gln Leu Gly Val Met  
275 280 285  
Thr Pro  
290

&lt;210&gt; 3029

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3029

Met Ala Ala Ala Arg Gly Pro Pro Asn Cys Gly Ala Pro Cys Pro Glu  
1 5 10 15

Val Cys Met Ala His Gly Lys Ile Pro Ala Ala Leu Gly Pro Ser Glu  
20 25 30

Gly Gly Ser Leu Cys His Leu His Thr Cys Leu Leu Pro Ser Leu Leu  
35 40 45

Ser Ser Arg Thr Phe Leu Asn Phe Leu Ala Pro Pro Ser Pro Pro Pro  
50 55 60

Ala Pro Pro Pro Pro Trp Ser Pro Pro Val Thr Leu Asn Gln Cys Pro  
65 70 75 80

Leu His Arg Pro Pro Ser Pro Ala Trp Ser Cys Val Leu Arg Val Leu  
85 90 95

Val Leu Phe Pro Ser Ala Pro Pro Pro Ser Leu Gln Pro Gly Pro Cys  
100 105 110

Pro Gln Ala Trp Gly Phe Ser Asp Ser Asp His Arg Lys Val Pro Ala  
115 120 125

Pro Lys Leu Gly  
130

&lt;210&gt; 3030

&lt;211&gt; 1016

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3030

Met	Glu	Phe	Gln	Asp	His	Arg	Tyr	Trp	Leu	Arg	Thr	His	Pro	Asn	Cys
1				5					10					15	
Ile	Val	Gly	Lys	Glu	Leu	Val	Asn	Trp	Leu	Ile	Arg	Asn	Gly	His	Ile
			20					25					30		
Ala	Thr	Arg	Ala	Gln	Ala	Ile	Ala	Ile	Gly	Gln	Ala	Met	Val	Asp	Gly
		35				40						45			
Arg	Trp	Leu	Asp	Cys	Val	Ser	His	His	Asp	Gln	Leu	Phe	Arg	Asp	Glu
	50					55					60				
Tyr	Ala	Leu	Tyr	Arg	Pro	Leu	Gln	Ser	Thr	Glu	Phe	Ser	Glu	Thr	Pro
65				70					75				80		
Ser	Pro	Asp	Ser	Asp	Ser	Val	Asn	Ser	Val	Glu	Gly	His	Ser	Glu	Pro
			85					90					95		
Ser	Trp	Phe	Lys	Asp	Ile	Lys	Phe	Asp	Asp	Ser	Asp	Thr	Glu	Gln	Ile
		100					105						110		
Ala	Glu	Glu	Gly	Asp	Asp	Asn	Leu	Ala	Lys	Tyr	Leu	Ile	Ser	Asp	Thr
	115					120				125					
Gly	Gly	Gln	Gln	Leu	Ser	Ile	Ser	Asp	Ala	Phe	Ile	Lys	Glu	Ser	Leu
	130					135				140					
Phe	Asn	Arg	Arg	Val	Glu	Glu	Lys	Ser	Lys	Glu	Leu	Pro	Phe	Thr	Pro
145				150					155				160		
Leu	Gly	Trp	His	His	Asn	Asn	Leu	Glu	Leu	Leu	Arg	Glu	Glu	Asn	Gly
			165					170					175		
Glu	Lys	Gln	Ala	Met	Glu	Arg	Leu	Leu	Ser	Ala	Asn	His	Asn	His	Met
		180						185				190			
Met	Ala	Leu	Leu	Gln	Gln	Leu	Leu	His	Ser	Asp	Ser	Leu	Ser	Ser	Ser
		195				200						205			
Trp	Arg	Asp	Ile	Ile	Val	Ser	Leu	Val	Cys	Gln	Val	Val	Gln	Thr	Val
	210					215						220			

Arg Pro Asp Val Lys Asn Gln Asp Asp Asp Met Asp Ile Arg Gln Phe  
225 230 235 240  
Val His Ile Lys Lys Ile Pro Gly Gly Lys Lys Phe Asp Ser Val Val  
245 250 255  
Val Asn Gly Phe Val Cys Thr Lys Asn Ile Ala His Lys Lys Met Asn  
260 265 270  
Ser Cys Ile Lys Asn Pro Lys Ile Leu Leu Leu Lys Cys Ser Ile Glu  
275 280 285  
Tyr Leu Tyr Arg Glu Glu Thr Lys Phe Thr Cys Ile Asp Pro Ile Val  
290 295 300  
Leu Gln Glu Arg Glu Phe Leu Lys Asn Tyr Val Gln Arg Ile Val Asp  
305 310 315 320  
Val Arg Pro Thr Leu Val Leu Val Glu Lys Thr Val Ser Arg Ile Ala  
325 330 335  
Gln Asp Met Leu Leu Glu His Gly Ile Thr Leu Val Ile Asn Val Lys  
340 345 350  
Ser Gln Val Leu Glu Arg Ile Ser Arg Met Thr Gln Gly Asp Leu Val  
355 360 365  
Met Ser Met Asp Gln Leu Leu Thr Lys Pro His Leu Gly Thr Cys His  
370 375 380  
Lys Phe Tyr Met Gln Ile Phe Gln Leu Pro Asn Glu Gln Thr Lys Thr  
385 390 395 400  
Leu Met Phe Phe Glu Gly Cys Pro Gln His Leu Gly Cys Thr Ile Lys  
405 410 415  
Leu Arg Gly Gly Ser Asp Tyr Glu Leu Ala Arg Val Lys Glu Ile Leu  
420 425 430  
Ile Phe Met Ile Cys Val Ala Tyr His Ser Gln Leu Glu Ile Ser Phe  
435 440 445  
Leu Met Asp Glu Phe Ala Met Pro Pro Thr Leu Met Gln Asn Pro Ser

450                      455                      460  
Phe His Ser Leu Ile Glu Gly Arg Gly His Glu Gly Ala Val Gln Glu  
465                      470                      475                      480  
Gln Tyr Gly Gly Gly Ser Ile Pro Trp Asp Pro Asp Ile Pro Pro Glu  
                         485                      490                      495  
Ser Leu Pro Cys Asp Asp Ser Ser Leu Leu Glu Ser Arg Ile Val Phe  
                         500                      505                      510  
Glu Lys Gly Glu Gln Glu Asn Lys Asn Leu Pro Gln Ala Val Ala Ser  
                         515                      520                      525  
Val Lys His Gln Glu His Ser Thr Thr Ala Cys Pro Ala Gly Leu Pro  
                         530                      535                      540  
Cys Ala Phe Phe Ala Pro Val Pro Glu Ser Leu Leu Pro Leu Pro Val  
545                      550                      555                      560  
Asp Asp Gln Gln Asp Ala Leu Gly Ser Glu Leu Pro Glu Ser Leu Gln  
                         565                      570                      575  
Gln Thr Val Val Leu Gln Asp Pro Lys Ser Gln Ile Arg Ala Phe Arg  
                         580                      585                      590  
Asp Pro Leu Gln Asp Asp Thr Gly Leu Tyr Val Thr Gly Glu Val Thr  
                         595                      600                      605  
Ser Ser Glu Asp Lys Arg Lys Thr Tyr Ser Leu Ala Phe Lys Gln Glu  
                         610                      615                      620  
Leu Lys Asp Val Ile Leu Cys Ile Ser Pro Val Ile Thr Phe Arg Glu  
625                      630                      635                      640  
Pro Phe Leu Leu Thr Glu Lys Gly Met Arg Cys Ser Thr Arg Asp Tyr  
                         645                      650                      655  
Phe Ala Glu Gln Val Tyr Trp Ser Pro Leu Leu Asn Lys Glu Phe Lys  
                         660                      665                      670  
Glu Met Glu Asn Arg Arg Lys Lys Gln Leu Leu Arg Asp Leu Ser Gly  
                         675                      680                      685

Leu Gln Gly Met Asn Gly Ser Ile Gln Ala Lys Ser Ile Gln Val Leu  
690 695 700  
Pro Ser His Glu Leu Val Ser Thr Arg Ile Ala Glu His Leu Gly Asp  
705 710 715 720  
Ser Gln Ser Leu Gly Arg Met Leu Ala Asp Tyr Arg Ala Arg Gly Gly  
725 730 735  
Arg Ile Gln Pro Lys Asn Ser Asp Pro Phe Ala His Ser Lys Asp Ala  
740 745 750  
Ser Ser Thr Ser Ser Gly Lys Ser Gly Ser Lys Asn Glu Gly Asp Glu  
755 760 765  
Glu Arg Gly Leu Ile Leu Ser Asp Ala Val Trp Ser Thr Lys Val Asp  
770 775 780  
Cys Leu Asn Pro Ile Asn His Gln Arg Leu Cys Val Leu Phe Ser Ser  
785 790 795 800  
Ser Ser Ala Gln Ser Ser Asn Ala Pro Ser Ala Cys Val Ser Pro Trp  
805 810 815  
Ile Val Thr Met Glu Phe Tyr Gly Lys Asn Asp Leu Thr Leu Gly Ile  
820 825 830  
Phe Leu Glu Arg Tyr Cys Phe Arg Pro Ser Tyr Gln Cys Pro Ser Met  
835 840 845  
Phe Cys Asp Thr Pro Met Val His His Ile Arg Arg Phe Val His Gly  
850 855 860  
Gln Gly Cys Val Gln Ile Ile Leu Lys Glu Leu Asp Ser Pro Val Pro  
865 870 875 880  
Gly Tyr Gln His Thr Ile Leu Thr Tyr Ser Trp Cys Arg Ile Cys Lys  
885 890 895  
Gln Val Thr Pro Val Val Ala Leu Ser Asn Glu Ser Trp Ser Met Ser  
900 905 910  
Phe Ala Lys Tyr Leu Glu Leu Arg Phe Tyr Gly His Gln Tyr Thr Arg



915	920	925
Arg Ala Asn Ala Glu Pro Cys Gly His Ser Ile His His Asp Tyr His		
930	935	940
Gln Tyr Phe Ser Tyr Asn Gln Met Val Ala Ser Phe Ser Tyr Ser Pro		
945	950	955
Ile Arg Leu Leu Glu Val Cys Val Pro Leu Pro Lys Ile Phe Ile Lys		
965	970	975
Arg Gln Ala Pro Leu Lys Val Ser Leu Leu Gln Asp Leu Lys Asp Phe		
980	985	990
Phe Gln Lys Val Ser Gln Val Tyr Val Ala Ile Asp Glu Arg Leu Ala		
995	1000	1005
Ser Leu Lys Thr Asp Thr Phe Ser		
1010	1015	

&lt;210&gt; 3031

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3031

Met Arg Ser His Gly Asn Ser Gly Leu Lys Lys Val Leu Leu Leu Leu
1 5 10 15
Phe Thr Ser Leu Cys Leu Lys Lys Asp Lys Gln His Arg Asn Leu Gln
20 25 30
Glu Ala Thr Glu Phe Ser Leu Asn Phe Phe Leu Cys Ser Cys Ala Trp
35 40 45
Asn Cys Ser Leu Leu His Phe Thr Ala Ser Val Tyr Lys Ser Asn Ser
50 55 60

Pro Ser Pro Glu Asn Trp Thr Glu Phe Gln Gln Val Gly Asn Leu His  
 65 70 75 80  
 Glu Asp Lys Met Tyr Cys Ser Ala Met Leu Gly Ile Leu Lys Asn Lys  
 85 90 95  
 Ala Leu Ser Ser Ala Asp Thr Gln Ala Ala Asp Phe Lys Asp Trp Lys  
 100 105 110  
 Lys Ser Phe Ala Ser Ser Leu Phe Ser Ile Gln Thr Gln Ser Val Ala  
 115 120 125  
 Ala Asn Val Leu Gln Met Asp Arg Ser Trp Gly Thr Trp Met Lys Leu  
 130 135 140  
 Glu Thr Ile Ile Leu Ser Lys Leu Thr Gln Glu Gln Lys Ser Lys His  
 145 150 155 160  
 Arg Met Phe Ser Leu Met Ile Gly Ser  
 165

&lt;210&gt; 3032

&lt;211&gt; 1314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3032

Met Lys Asp Asn Asp Lys Asn Met Ser Thr Glu Asp Thr Lys Lys Asn  
 1 5 10 15  
 Ser Asp Glu Lys Thr Asp Glu Glu Lys Ile Thr Ser Phe Ala Ser Ala  
 20 25 30  
 Asn Val Ser Ser Asp Gln Trp Ser Leu Glu Asp Arg His Ser Leu Asp  
 35 40 45  
 Ser Asn Thr Pro Leu Phe Pro Glu Asp Ser Ser Val Gly Glu Leu Ser

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Gly Phe Ile Gly Arg Gly Asn Leu Gln Val Cys Ala Met Ala Ser Ala  
290 295 300  
Lys Leu Asn Thr Leu Leu Gln Thr Lys Val Ile Glu Asn Gln Asp Glu  
305 310 315 320  
Ala Cys Tyr Ile Leu Gly Lys Leu Glu His Val Leu Ser Gln Ser Ile  
325 330 335  
Lys Glu Gln Thr Glu Ile Tyr Ser Phe Leu Ile Pro Leu Val Arg Thr  
340 345 350  
Leu Val Ser Lys Ile Tyr Glu Leu Leu Phe Met Asn Leu His Leu Pro  
355 360 365  
Ser Leu Pro Phe Thr Asn Gly Ser Ser Ser Phe Phe Glu Asp Phe Gln  
370 375 380  
Glu Tyr Cys Asn Ser Asn Glu Trp Gln Val Tyr Ile Glu Lys Tyr Ile  
385 390 395 400  
Val Pro Tyr Met Lys Gln Tyr Glu Ala His Thr Phe Tyr Asp Gly His  
405 410 415  
Glu Asn Met Ala Leu Tyr Trp Lys Asp Cys Tyr Glu Ala Leu Met Val  
420 425 430  
Asn Met His Lys Arg Asp Arg Glu Gly Gly Glu Ser Lys Leu Lys Phe  
435 440 445  
Gln Glu Leu Phe Val Glu Pro Phe Asn Arg Lys Ala Arg Gln Glu Asn  
450 455 460  
Leu Arg Tyr Asn Asn Met Leu Lys Arg Leu Ser Ser Gln Gln Leu Ala  
465 470 475 480  
Thr Leu Arg Arg Trp Lys Ala Ile Gln Leu Tyr Leu Thr Cys Glu Arg  
485 490 495  
Gly Pro Trp Ala Lys Arg Lys Gln Asn Pro Ile His Trp Lys Leu Ala  
500 505 510  
Asn Val Glu Asn Tyr Ser Arg Met Arg Leu Lys Leu Val Pro Asn Tyr

515 520 525  
Asn Phe Lys Thr His Glu Glu Ala Ser Ala Leu Arg Asp Asn Leu Gly  
530 535 540  
Ile Gln His Ser Gln Pro Ser Ser Asp Thr Leu Leu Leu Glu Val Val  
545 550 555 560  
Lys Gln Val Lys Val Ser Asp Met Val Glu Asp Lys Leu Asp Leu Pro  
565 570 575  
Glu Glu Asp Ile Thr Ala Arg Val Asn Val Asp Glu Lys Glu Glu Gln  
580 585 590  
Asp Gln Lys Glu Lys Leu Val Leu Met Glu Asp Cys Glu Leu Ile Thr  
595 600 605  
Ile Ile Asp Val Ile Pro Gly Arg Leu Glu Ile Thr Thr Gln His Ile  
610 615 620  
Tyr Phe Tyr Asp Gly Ser Ile Glu Lys Glu Asp Gly Val Gly Phe Asp  
625 630 635 640  
Phe Lys Trp Pro His Ser Gln Ile Arg Glu Ile His Leu Arg Arg Tyr  
645 650 655  
Asn Leu Arg Arg Ser Ala Leu Glu Ile Phe His Val Asp Gln Ser Asn  
660 665 670  
Tyr Phe Leu Asn Phe Lys Lys Glu Val Arg Asn Lys Ile Tyr Ser Arg  
675 680 685  
Leu Leu Ser Leu His Ser Pro Asn Ser Tyr Tyr Gly Ser Arg Ser Pro  
690 695 700  
Gln Glu Leu Phe Lys Ala Ser Gly Leu Thr Gln Lys Trp Val Asn Arg  
705 710 715 720  
Glu Ile Ser Asn Phe Asp Tyr Leu Ile Gln Ile Asn Thr Met Ala Gly  
725 730 735  
Arg Thr Tyr Asn Asp Leu Ala Gln Tyr Pro Val Phe Pro Trp Ile Leu  
740 745 750

Gln Asp Tyr Thr Ser Glu Glu Leu Asp Leu Asn Asn Pro Ala Val Phe  
755 760 765  
Arg Asp Leu Ser Lys Pro Ile Gly Val Val Asn Glu Lys Asn Ala Lys  
770 775 780  
Ala Met Arg Glu Lys Tyr Glu Asn Phe Glu Asp Pro Met Gly Thr Ile  
785 790 795 800  
Asp Lys Phe His Tyr Gly Thr His Tyr Ser Asn Ser Ala Gly Val Met  
805 810 815  
His Tyr Leu Ile Arg Val Glu Pro Phe Thr Thr Leu His Ile Gln Leu  
820 825 830  
Gln Ser Gly Arg Phe Asp Cys Ala Asp Arg Gln Phe His Ser Ile Pro  
835 840 845  
Ala Thr Trp Gln Ala Leu Met Asp Asn Pro Tyr Asp Val Lys Glu Leu  
850 855 860  
Ile Pro Glu Phe Phe Tyr Phe Pro Glu Phe Leu Glu Asn Gln Asn Gln  
865 870 875 880  
Phe Asn Leu Gly Arg Leu Gln Ile Ser Lys Glu Leu Val Asn Asp Val  
885 890 895  
Ile Leu Pro Lys Trp Ala Lys Ser Ala Glu Asp Phe Ile Tyr Lys His  
900 905 910  
Arg Lys Ala Leu Glu Ser Glu Tyr Val Ser Ala His Leu His Glu Trp  
915 920 925  
Ile Asp Leu Ile Phe Gly Tyr Lys Gln Arg Gly Pro Ala Ala Val Glu  
930 935 940  
Ala Leu Asn Val Phe Tyr Tyr Cys Ser Tyr Glu Gly Ala Val Asp Leu  
945 950 955 960  
Asp Ala Leu Thr Asp Glu Lys Glu Arg Lys Ala Leu Glu Gly Met Ile  
965 970 975  
Asn Asn Phe Gly Gln Thr Pro Cys Gln Leu Leu Lys Ile Thr Ile Ser

980 985 990  
Met Asn Tyr Val Ile Gly Thr His Gly Trp Leu Pro Tyr Asp Arg Asn  
995 1000 1005  
Ile Ser Asn Tyr Phe Thr Phe Ile Lys Asp Gln Thr Val Thr Asn Pro  
1010 1015 1020  
Lys Thr Gln Arg Ser Ile Asn Gly Ser Phe Ala Pro Gly Leu Glu Ile  
1025 1030 1035 1040  
Thr Ser Lys Leu Phe Val Val Ser His Asp Ala Lys Leu Leu Phe Ser  
1045 1050 1055  
Ala Gly Tyr Trp Asp Asn Ser Ile Gln Val Met Ser Leu Thr Lys Gly  
1060 1065 1070  
Lys Ile Ile Ser His Ile Ile Arg His Met Asp Ile Val Thr Cys Leu  
1075 1080 1085  
Ala Thr Asp Tyr Cys Gly Ile His Leu Ile Ser Gly Ser Arg Asp Thr  
1090 1095 1100  
Thr Cys Met Ile Trp Gln Ile Thr Gln Gln Gly Gly Val Pro Val Gly  
1105 1110 1115 1120  
Leu Ala Ser Lys Pro Phe Gln Ile Leu Tyr Gly His Thr Asn Glu Val  
1125 1130 1135  
Leu Ser Val Gly Ile Ser Thr Glu Leu Asp Met Ala Val Ser Gly Ser  
1140 1145 1150  
Arg Asp Gly Thr Val Ile Ile His Thr Ile Pro Asn Leu Ala Ile Ser  
1155 1160 1165  
Trp Glu Gly His Ile Val Val Tyr Ser Ser Thr Glu Glu Lys Thr Thr  
1170 1175 1180  
Leu Lys Asp Lys Asn Ala Leu His Leu Phe Ser Ile Asn Gly Lys Tyr  
1185 1190 1195 1200  
Leu Gly Ser Gln Ile Leu Lys Glu Gln Val Ser Asp Ile Cys Ile Ile  
1205 1210 1215

Gly Glu His Ile Val Thr Gly Ser Ile Gln Gly Phe Leu Ser Ile Arg  
 1220 1225 1230  
 Asp Leu His Ser Leu Asn Leu Ser Ile Asn Pro Leu Ala Met Arg Leu  
 1235 1240 1245  
 Pro Ile His Cys Val Cys Val Thr Lys Glu Tyr Ser His Ile Leu Val  
 1250 1255 1260  
 Gly Leu Glu Asp Gly Lys Leu Ile Val Val Gly Val Gly Lys Pro Ala  
 1265 1270 1275 1280  
 Glu Met Arg Ser Gly Gln Leu Ser Arg Lys Phe Trp Gly Ser Ser Lys  
 1285 1290 1295  
 Arg Leu Ser Gln Ile Ser Ala Gly Glu Thr Glu Tyr Asn Thr Gln Asp  
 1300 1305 1310  
 Ser Lys

<210> 3033

<211> 172

<212> PRT

<213> Homo sapiens

<400> 3033

Met Thr Ser Gly Glu Leu Thr Ala Ser Ser Trp Lys Val Thr Trp Ala  
 1 5 10 15  
 Ala Glu Gly Asn Ser Leu Ala Val Arg Leu Gly Leu Arg Leu Pro Thr  
 20 25 30  
 Thr Thr Leu Lys Pro Glu Pro Thr Arg Arg Val Ala Arg Glu Arg Ala  
 35 40 45  
 Lys Ser Pro Leu Pro Arg Met Pro Thr Leu Gly Ala Ser Ser Gly Thr



50                                      55                                      60  
 Leu Ala Arg Leu Leu Ser Leu Ser Thr Arg Trp Arg Leu Ile Ser Gly  
 65                                      70                                      75                                      80  
 Leu Ser Ile Ser Ser Gly Ile Leu Val Ala Ala Arg Glu Val Arg Asn  
                                     85                                      90                                      95  
 Leu Val Ser Gly Gly Leu Leu Asp Cys Pro Phe Cys His Leu Pro Pro  
                                     100                                      105                                      110  
 Leu Ile His Arg Asn Tyr Thr Ala Val Arg His Ser Pro Ser Arg Cys  
                                     115                                      120                                      125  
 Ser Pro Ser Ala Thr Thr Cys Gln His Gln Gly Asn Lys Leu Asn Thr  
                                     130                                      135                                      140  
 Thr Gln Pro Leu Pro Trp Gly Glu His Arg Leu Arg Lys Ser Arg Asp  
 145                                      150                                      155                                      160  
 Asp Phe Cys Pro Pro Pro Phe Val Pro Pro Ala Glu  
                                     165                                      170

&lt;210&gt; 3034

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3034

Met His Cys Asp Lys Asn Asn Ile Ser Lys Glu Leu Phe Leu Phe Phe  
 1                                      5                                      10                                      15  
 Phe Phe Phe Leu Arg Trp Ser Phe Ala Leu Val Ala Gln Gly Gly Val  
                                     20                                      25                                      30  
 Gln Trp Tyr Asp Leu Gly Ser Pro Gln Pro Leu Pro Pro Gly Phe Lys  
                                     35                                      40                                      45

Gln Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Gly Tyr Arg His Val  
 50 55 60  
 Pro Gln Arg Pro Ala Asn Phe Leu Phe Leu Val Glu Thr Gly Phe Leu  
 65 70 75 80  
 Tyr Ile Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Pro Pro  
 85 90 95  
 Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His Cys Ala  
 100 105 110  
 Arg Pro Glu Leu Phe His Thr Leu Arg Leu Cys Phe Ser Ile Lys Glu  
 115 120 125  
 Ser Val Glu Val  
 130

&lt;210&gt; 3035

&lt;211&gt; 524

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3035

Met Asn Arg Pro Ser Ala Ala Asn Pro Cys Ser Pro Val Gln Phe Ser  
 1 5 10 15  
 Ser Thr Pro Leu Ala Gly Leu Ala Pro Lys Arg Arg Ala Gly Asp Pro  
 20 25 30  
 Gly Glu Met Pro Gln Ser Pro Thr Gly Leu Gly Gln Pro Lys Arg Arg  
 35 40 45  
 Gly Arg Pro Pro Lys Met Cys Ser Gly Trp Trp Trp Ile Arg Asp Pro  
 50 55 60  
 Glu Met Leu Asp Ala Met Leu Lys Ala Leu His Pro Arg Gly Ile Arg

65	70	75	80
Glu Lys Ala Leu His Lys His Leu Asn Lys His Arg Asp Phe Leu Gln			
85	90	95	
Glu Val Cys Leu Arg Pro Ser Ala Asp Pro Ile Phe Glu Pro Arg Gln			
100	105	110	
Leu Pro Ala Phe Gln Glu Gly Ile Met Ser Trp Ser Pro Lys Glu Lys			
115	120	125	
Thr Tyr Glu Thr Asp Leu Ala Val Leu Gln Trp Val Glu Glu Leu Glu			
130	135	140	
Gln Arg Val Ile Met Ser Asp Leu Gln Ile Arg Gly Trp Thr Cys Pro			
145	150	155	160
Ser Pro Asp Ser Thr Arg Glu Asp Leu Ala Tyr Cys Glu His Leu Ser			
165	170	175	
Asp Ser Gln Glu Asp Ile Thr Trp Arg Gly Arg Gly Arg Glu Gly Leu			
180	185	190	
Ala Pro Gln Arg Lys Thr Thr Asn Pro Leu Asp Leu Ala Val Met Arg			
195	200	205	
Leu Ala Ala Leu Glu Gln Asn Val Glu Arg Arg Tyr Leu Arg Glu Pro			
210	215	220	
Leu Trp Pro Thr His Glu Val Val Leu Glu Lys Ala Leu Leu Ser Thr			
225	230	235	240
Pro Asn Gly Ala Pro Glu Gly Thr Thr Thr Glu Ile Ser Tyr Glu Ile			
245	250	255	
Thr Pro Arg Ile Arg Val Trp Arg Gln Thr Leu Glu Arg Cys Arg Ser			
260	265	270	
Ala Ala Gln Val Cys Leu Cys Leu Gly Gln Leu Glu Arg Ser Ile Ala			
275	280	285	
Trp Glu Lys Ser Val Asn Lys Val Thr Cys Leu Val Cys Arg Lys Gly			
290	295	300	

Asp Asn Asp Glu Phe Leu Leu Leu Cys Asp Gly Cys Asp Arg Gly Cys  
305 310 315 320  
His Ile Tyr Cys His Arg Pro Lys Met Glu Ala Val Pro Glu Gly Asp  
325 330 335  
Trp Phe Cys Thr Val Cys Leu Ala Gln Gln Val Glu Gly Glu Phe Thr  
340 345 350  
Gln Lys Pro Gly Phe Pro Lys Arg Gly Gln Lys Arg Lys Ser Gly Tyr  
355 360 365  
Ser Leu Asn Phe Ser Glu Gly Asp Gly Arg Arg Arg Arg Val Leu Leu  
370 375 380  
Arg Gly Arg Glu Ser Pro Ala Ala Gly Pro Arg Tyr Ser Glu Glu Gly  
385 390 395 400  
Leu Ser Pro Ser Lys Arg Arg Arg Leu Ser Met Arg Asn His His Ser  
405 410 415  
Asp Leu Thr Phe Cys Glu Ile Ile Leu Met Glu Met Glu Ser His Asp  
420 425 430  
Ala Ala Trp Pro Phe Leu Glu Pro Val Asn Pro Arg Leu Val Ser Gly  
435 440 445  
Tyr Arg Arg Ile Ile Lys Asn Pro Met Asp Phe Ser Thr Met Arg Glu  
450 455 460  
Arg Leu Leu Arg Gly Gly Tyr Thr Ser Ser Glu Glu Phe Ala Ala Asp  
465 470 475 480  
Ala Leu Leu Val Phe Asp Asn Cys Gln Thr Phe Asn Glu Asp Asp Ser  
485 490 495  
Glu Val Gly Lys Ala Gly His Ile Met Arg Arg Phe Phe Glu Ser Arg  
500 505 510  
Trp Glu Glu Phe Tyr Gln Gly Lys Gln Ala Asn Leu  
515 520

&lt;210&gt; 3036

&lt;211&gt; 938

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3036

Met Lys Gly Val Gln Gln Gly Ile Glu Gln Arg Val Lys Ser Phe Asn

1 5 10 15

Val Gly Arg Gly Arg Gly Leu Pro Lys Lys Ile Lys Arg Lys Glu Arg

20 25 30

Gly Gly Arg Thr Asn Lys Gly Pro Asn Val Phe Ser Val Ser Asp Asp

35 40 45

Phe Gln Glu Tyr Asn Lys Pro Gly Lys Lys Trp Lys Val Met Thr Gln

50 55 60

Glu Phe Ile Asn Gln His Thr Val Glu His Lys Gly Lys Gln Ile Cys

65 70 75 80

Lys Tyr Phe Leu Glu Gly Arg Cys Ile Lys Gly Asp Gln Cys Lys Phe

85 90 95

Asp His Asp Ala Glu Leu Glu Lys Arg Lys Glu Ile Cys Lys Phe Tyr

100 105 110

Leu Gln Gly Tyr Cys Thr Lys Gly Glu Asn Cys Ile Tyr Met His Asn

115 120 125

Glu Phe Pro Cys Lys Phe Tyr His Ser Gly Ala Lys Cys Tyr Gln Gly

130 135 140

Asp Asn Cys Lys Phe Ser His Asp Asp Leu Thr Lys Glu Thr Lys Lys

145 150 155 160

Leu Leu Asp Lys Val Leu Asn Thr Asp Glu Glu Leu Ile Asn Glu Asp

165 170 175

Glu Arg Glu Leu Glu Glu Leu Arg Lys Arg Gly Ile Thr Pro Leu Pro  
180 185 190  
Lys Pro Pro Pro Gly Val Gly Leu Leu Pro Thr Pro Pro Glu His Phe  
195 200 205  
Pro Phe Ser Asp Pro Glu Asp Asp Phe Gln Thr Asp Phe Ser Asp Asp  
210 215 220  
Phe Arg Lys Ile Pro Ser Leu Phe Glu Ile Val Val Lys Pro Thr Val  
225 230 235 240  
Asp Leu Ala His Lys Ile Gly Arg Lys Pro Pro Ala Phe Tyr Thr Ser  
245 250 255  
Ala Ser Pro Pro Gly Pro Gln Phe Gln Gly Ser Ser Pro His Pro Gln  
260 265 270  
His Ile Tyr Ser Ser Gly Ser Ser Pro Gly Pro Gly Pro Asn Met Ser  
275 280 285  
Gln Gly His Ser Ser Pro Val Met His Pro Gly Ser Pro Gly His His  
290 295 300  
Pro Cys Ala Gly Pro Pro Gly Leu Pro Val Pro Gln Ser Pro Pro Leu  
305 310 315 320  
Pro Pro Gly Pro Pro Glu Ile Val Gly Pro Gln Asn Gln Ala Gly Val  
325 330 335  
Leu Val Gln Pro Asp Thr Ser Leu Thr Pro Pro Ser Met Gly Gly Ala  
340 345 350  
Tyr His Ser Pro Gly Phe Pro Gly His Val Met Lys Val Pro Arg Glu  
355 360 365  
Asn His Cys Ser Pro Gly Ser Ser Tyr Gln Gln Ser Pro Gly Glu Met  
370 375 380  
Gln Leu Asn Thr Asn Tyr Glu Ser Leu Gln Asn Pro Ala Glu Phe Tyr  
385 390 395 400  
Asp Asn Tyr Tyr Ala Gln His Ser Ile His Asn Phe Gln Pro Pro Asn

405	410	415
Asn Ser Gly Asp Gly Met Trp His Gly Glu Phe Ala Gln Gln Gln Pro		
420	425	430
Pro Val Val Gln Asp Ser Pro Asn His Gly Ser Gly Ser Asp Gly Ser		
435	440	445
Ser Thr Arg Thr Gly His Gly Pro Leu Pro Val Pro Gly Leu Leu Pro		
450	455	460
Ala Val Gln Arg Ala Leu Phe Val Arg Leu Thr Gln Arg Tyr Gln Glu		
465	470	475
480		
Asp Glu Glu Gln Thr Ser Thr Gln Pro His Arg Ala Pro Ser Lys Glu		
485	490	495
Glu Asp Asp Thr Val Asn Trp Tyr Ser Ser Ser Glu Glu Glu Glu Gly		
500	505	510
Ser Ser Val Lys Ser Ile Leu Lys Thr Leu Gln Lys Gln Thr Glu Thr		
515	520	525
Leu Arg Asn Gln Gln Gln Pro Ser Thr Glu Leu Ser Thr Pro Thr Asp		
530	535	540
Pro Arg Leu Ala Lys Glu Lys Ser Lys Gly Asn Gln Val Val Asp Pro		
545	550	555
560		
Arg Leu Arg Thr Ile Pro Arg Gln Asp Ile Arg Lys Pro Ser Glu Ser		
565	570	575
Ala Pro Leu Asp Leu Arg Leu Ala Trp Asp Pro Arg Lys Leu Arg Gly		
580	585	590
Asn Gly Ser Gly His Ile Gly Ser Ser Val Gly Gly Ala Lys Phe Asp		
595	600	605
Leu His His Ala Asn Ala Gly Thr Asn Val Lys His Lys Arg Gly Asp		
610	615	620
Asp Asp Asp Glu Asp Thr Glu Arg Glu Leu Arg Glu Lys Ala Phe Leu		
625	630	635
640		

Ile Pro Leu Asp Ala Ser Pro Gly Ile Met Leu Gln Asp Pro Arg Ser  
645 650 655  
Gln Leu Arg Gln Phe Ser His Ile Lys Met Asp Ile Thr Leu Thr Lys  
660 665 670  
Pro Asn Phe Ala Lys His Ile Val Trp Ala Pro Glu Asp Leu Leu Pro  
675 680 685  
Val Pro Leu Pro Lys Pro Asp Pro Val Ser Ser Ile Asn Leu Pro Leu  
690 695 700  
Pro Pro Leu Ile Ala Asp Gln Arg Leu Asn Arg Leu Trp Asn Thr Lys  
705 710 715 720  
Ser Asp Leu His Gln Asn Thr Val Ser Ile Asp Pro Lys Leu Ala Ala  
725 730 735  
Lys Ala Lys Ile Asn Thr Thr Asn Arg Glu Gly Tyr Leu Glu Gln Phe  
740 745 750  
Gly Asp Ser His Gly Ser Gly Ala Lys Leu Gly Asp Pro Arg Leu Gln  
755 760 765  
Lys Asn Phe Asp Pro Arg Leu His Arg Leu Pro Asn Thr Glu Ser His  
770 775 780  
Gln Val Val Met Lys Asp Ser His Ala Ser Lys Gly Ala Pro His Leu  
785 790 795 800  
Pro Arg Ser Asn Pro Gly Ser Ser Gln Pro Ser Gly Ala Gly Thr Ser  
805 810 815  
Asn Ser Gly Ser Gly Ala Leu Pro Pro Tyr Ala Pro Lys Leu Ser Ser  
820 825 830  
Ser Ala Gly Leu Pro Leu Gly Thr Ser Thr Ser Val Leu Ser Gly Ile  
835 840 845  
Ser Leu Tyr Asp Pro Arg Asp His Gly Ser Ser Ser Thr Ser Glu Leu  
850 855 860  
Ala Thr Ala Ser Ser Gly Glu Asn Ser Lys Asn Gln Lys Lys Ser Gly



865                      870                      875                      880  
 Gly Leu Lys Ser Ser Asp Lys Thr Glu Pro Ser Pro Gly Glu Ala Ile  
                          885                      890                      895  
 Leu Pro Gln Lys Pro Ser Pro Asn Val Gly Val Thr Leu Glu Gly Pro  
                          900                      905                      910  
 Ala Asp Pro Gln Ala Asp Val Pro Arg Val Leu Val Arg Phe Arg Ser  
                          915                      920                      925  
 Gln Gln Cys Thr Ala Phe Leu Phe Arg His  
                          930                      935

<210> 3037

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3037

Met Cys Gly Arg Lys Gly Asn Leu His Phe Ile Arg Phe Pro Ser Cys  
   1                      5                      10                      15  
 Ala Met His Arg Phe Ile Gln Met Gly Ser Glu Lys Asn Phe Ser Ser  
                          20                      25                      30  
 Leu His Thr Thr Leu Cys Ala Thr Gly Gly Gly Ala Phe Lys Phe Glu  
                          35                      40                      45  
 Glu Asp Phe Arg Met Ile Ala Asp Leu Gln Leu His Lys Leu Asp Glu  
                          50                      55                      60  
 Leu Asp Cys Leu Ile Gln Gly Leu Leu Tyr Val Asp Ser Val Gly Phe  
                          65                      70                      75                      80  
 Asn Gly Lys Pro Glu Cys Tyr Tyr Phe Glu Asn Pro Thr Asn Pro Glu  
                          85                      90                      95

Leu Cys Gln Lys Lys Pro Tyr Cys Leu Asp Asn Pro Tyr Pro Met Leu  
 100 105 110  
 Leu Val Asn Met Gly Ser Gly Val Ser Ile Leu Ala Val Tyr Ser Lys  
 115 120 125  
 Asp Asn Tyr Lys Arg Val Thr Gly Thr Ser Leu Gly Gly Gly Thr Phe  
 130 135 140  
 Leu Gly Leu Cys Cys Leu Leu Thr Gly Cys Glu Thr Phe Glu Glu Ala  
 145 150 155 160  
 Leu Glu Met Ala Ala Lys Gly Asp Ser Thr Asn Val Asp Lys Leu Val  
 165 170 175  
 Lys Asp Ile Tyr Gly Gly Asp Tyr Glu Arg Phe Gly Leu Gln Gly Ser  
 180 185 190  
 Ala Val Ala Ser Ser Phe Gly Asn Met Met Ser Lys Glu Lys Arg Asp  
 195 200 205  
 Ser Ile Ser Lys Glu Asp Leu Ala Arg Ala Thr Leu Val Thr Ile Thr  
 210 215 220  
 Asn Asn Ile Gly Ser Ile Ala Arg Met Cys Ala Leu Asn Glu Asn Ile  
 225 230 235 240  
 Asp Arg Val Val Phe Val Gly Asn Phe Leu Arg Ile Asn Lys Val Ser  
 245 250 255  
 Met Lys Leu Leu Ala Tyr Ala Met Asp Phe Trp Ser Lys Gly Gln Leu  
 260 265 270  
 Lys Ala Leu Phe Leu Glu His Glu Gly Tyr Phe Gly Ala Val Gly Ala  
 275 280 285  
 Leu Leu Glu Leu Phe Lys Met Thr Asp Asp Lys  
 290 295

&lt;210&gt; 3038

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3038

Met His His Arg Asn Asp Ser Gln Arg Leu Gly Lys Ala Gly Cys Pro

1 5 10 15

Pro Glu Pro Ser Leu Gln Met Ala Asn Thr Asn Phe Leu Ser Thr Leu

20 25 30

Ser Pro Glu His Cys Arg Pro Leu Ala Gly Glu Cys Met Asn Lys Leu

35 40 45

Lys Cys Gly Ala Ala Glu Ala Glu Ile Met Asn Leu Pro Glu Arg Val

50 55 60

Gly Thr Phe Ser Ala Ile Pro Ala Leu Gly Gly Ile Ser Leu Pro Pro

65 70 75 80

Gly Val Ile Val Met Thr Ala Leu His Ser Pro Ala Ala Ala Ser Ala

85 90 95

Ala Val Thr Asp Ser Ala Phe Gln Ile Ala Asn Leu Ala Asp Cys Pro

100 105 110

Gln Asn His Ser Ser Ser Ser Ser Ser Ser Ser Gly Gly Ala Gly Gly

115 120 125

Ala Asn Pro Ala Lys Lys Lys Arg Lys Arg Cys Gly Val Cys Val Pro

130 135 140

Cys Lys Arg Leu Ile Asn Cys Gly Val Cys Ser Ser Cys Arg Asn Arg

145 150 155 160

Lys Thr Gly His Gln Ile Cys Lys Phe Arg Lys Cys Glu Glu Leu Lys

165 170 175

Lys Lys Pro Gly Thr Ser Leu Glu Arg Thr Pro Val Pro Ser Ala Glu

180 185 190

Ala Phe Arg Trp Phe Phe

195

<210> 3039

<211> 426

<212> PRT

<213> Homo sapiens

<400> 3039

Met Leu Glu Asn Tyr Gly Ala Val Ala Ser Leu Ala Ala Phe Pro Phe

1 5 10 15

Pro Lys Pro Ala Leu Ile Ser Gln Leu Glu Arg Gly Glu Thr Pro Trp

20 25 30

Cys Ser Val Pro Arg Gly Ala Leu Asp Gly Glu Ala Pro Arg Gly Ile

35 40 45

Ser Ser Gly Tyr Pro Phe Leu Lys Pro Ala Gly Ile Ser His Pro Glu

50 55 60

Gln Val Glu Glu Pro Leu Asn Leu Lys Leu Gln Gly Glu Gly Pro Ser

65 70 75 80

Leu Ile Cys Pro Glu Gly Val Leu Lys Arg Lys Lys Glu Asp Phe Ile

85 90 95

Leu Lys Glu Glu Ile Ile Glu Glu Ala Gln Asp Leu Met Val Leu Ser

100 105 110

Ser Gly Pro Gln Trp Cys Gly Ser Gln Glu Leu Trp Phe Gly Lys Thr

115 120 125

Cys Glu Glu Lys Ser Arg Leu Gly Arg Trp Pro Gly Tyr Leu Asn Gly

130 135 140

Gly Arg Met Glu Ser Ser Thr Asn Asp Ile Ile Glu Val Ile Val Lys

145                      150                      155                      160  
Asp Glu Met Ile Ser Val Glu Glu Ser Ser Gly Asn Thr Asp Val Asn  
                         165                      170                      175  
Asn Leu Leu Gly Ile His His Lys Ile Leu Asn Glu Gln Ile Phe Tyr  
                         180                      185                      190  
Ile Cys Glu Glu Cys Gly Lys Cys Phe Asp Gln Asn Glu Asp Phe Asp  
                         195                      200                      205  
Gln His Gln Lys Thr His Asn Gly Glu Lys Val Tyr Gly Cys Lys Glu  
                         210                      215                      220  
Cys Gly Lys Ala Phe Ser Phe Arg Ser His Cys Ile Ala His Gln Arg  
225                      230                      235                      240  
Ile His Ser Gly Val Lys Pro Tyr Glu Cys Gln Glu Cys Ala Lys Ala  
                         245                      250                      255  
Phe Val Trp Lys Ser Asn Leu Ile Arg His Gln Arg Ile His Thr Gly  
                         260                      265                      270  
Glu Lys Pro Phe Glu Cys Lys Glu Cys Gly Lys Gly Phe Ser Gln Asn  
                         275                      280                      285  
Thr Ser Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr  
                         290                      295                      300  
Thr Cys Lys Glu Cys Gly Lys Ser Phe Thr Arg Asn Pro Ala Leu Leu  
305                      310                      315                      320  
Arg His Gln Arg Met His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Asp  
                         325                      330                      335  
Cys Gly Lys Gly Phe Met Trp Asn Ser Asp Leu Ser Gln His Gln Arg  
                         340                      345                      350  
Val His Thr Gly Asp Lys Pro His Glu Cys Thr Asp Cys Gly Lys Ser  
                         355                      360                      365  
Phe Phe Cys Lys Ala His Leu Ile Arg His Gln Arg Ile His Thr Gly  
                         370                      375                      380

Glu Arg Pro Tyr Lys Cys Asn Asp Cys Gly Lys Ala Phe Ser Gln Asn  
 385                      390                      395                      400  
 Ser Val Leu Ile Lys His Gln Arg Arg His Ala Arg Asp Lys Pro Tyr  
                     405                      410                      415  
 Asn Cys Gln Ile Ser His Leu Leu Glu His  
                     420                      425

<210> 3040

<211> 439

<212> PRT

<213> Homo sapiens

<400> 3040

Met Ala Glu Ala Ala Ala Leu Val Trp Ile Arg Gly Pro Gly Phe Gly  
 1                      5                      10                      15  
 Cys Lys Ala Val Arg Cys Ala Ser Gly Arg Cys Thr Val Arg Asp Phe  
                     20                      25                      30  
 Ile His Arg His Cys Gln Asp Gln Asn Val Pro Val Glu Asn Phe Phe  
                     35                      40                      45  
 Val Lys Cys Asn Gly Ala Val Tyr Ser Leu Glu Pro Arg Leu Cys Gly  
                     50                      55                      60  
 Gly Lys Gly Gly Phe Gly Ser Met Leu Arg Ala Leu Gly Ala Gln Ile  
 65                      70                      75                      80  
 Glu Lys Thr Thr Asn Arg Glu Ala Cys Arg Asp Leu Ser Gly Arg Arg  
                     85                      90                      95  
 Leu Arg Asp Val Asn His Glu Lys Ala Met Ala Glu Trp Val Lys Gln  
                     100                      105                      110  
 Gln Ala Glu Arg Glu Ala Glu Lys Glu Gln Lys Arg Leu Glu Arg Leu

115	120	125
Gln Arg Lys Leu Val Glu Pro Lys His Cys Phe Thr Ser Pro Asp Tyr		
130	135	140
Gln Gln Gln Cys His Gly Met Ala Glu Arg Leu Glu Asp Ser Val Leu		
145	150	155
Lys Gly Met Gln Ala Ala Ser Ser Lys Met Val Ser Ala Glu Ile Ser		
165	170	175
Glu Asn Arg Lys Arg Gln Trp Pro Thr Lys Ser Gln Thr Asp Arg Gly		
180	185	190
Ala Ser Ala Gly Lys Arg Arg Cys Phe Trp Leu Gly Met Glu Gly Leu		
195	200	205
Glu Thr Ala Glu Gly Ser Asn Ser Glu Ser Ser Asp Asp Asp Ser Glu		
210	215	220
Glu Ala Pro Ser Thr Ser Gly Met Gly Phe His Ala Pro Lys Ile Gly		
225	230	235
Ser Asn Gly Val Glu Met Ala Ala Lys Phe Pro Ser Gly Ser Gln Arg		
245	250	255
Ala Arg Val Val Asn Thr Asp His Gly Ser Pro Glu Gln Leu Gln Ile		
260	265	270
Pro Val Thr Asp Ser Gly Arg His Ile Leu Glu Asp Ser Cys Ala Glu		
275	280	285
Leu Gly Glu Ser Lys Glu His Met Glu Ser Arg Met Val Thr Glu Thr		
290	295	300
Glu Glu Thr Gln Glu Lys Lys Ala Glu Ser Lys Glu Pro Ile Glu Glu		
305	310	315
Glu Pro Thr Gly Ala Gly Leu Asn Lys Asp Lys Glu Thr Glu Glu Arg		
325	330	335
Thr Asp Gly Glu Arg Val Ala Glu Val Ala Pro Glu Glu Arg Glu Asn		
340	345	350

Val Ala Val Ala Lys Leu Gln Glu Ser Gln Pro Gly Asn Ala Val Ile  
 355 360 365  
 Asp Lys Glu Thr Ile Asp Leu Leu Ala Phe Thr Ser Val Ala Glu Leu  
 370 375 380  
 Glu Leu Leu Gly Leu Glu Lys Leu Lys Cys Glu Leu Met Ala Leu Gly  
 385 390 395 400  
 Leu Lys Cys Gly Gly Thr Leu Gln Glu Arg Ala Ala Arg Leu Phe Ser  
 405 410 415  
 Val Arg Gly Leu Ala Lys Glu Gln Ile Asp Pro Ala Leu Phe Ala Lys  
 420 425 430  
 Pro Leu Lys Gly Lys Lys Lys  
 435

<210> 3041

<211> 1162

<212> PRT

<213> Homo sapiens

<400> 3041

Met Ala Ala Pro Val Pro Leu Pro Val Asp Val Ala Val Arg Ser Leu  
 1 5 10 15  
 Lys Glu Pro Pro Ile Ile Ile Val Pro Glu Ser Leu Glu Ala Asp Thr  
 20 25 30  
 Lys Gln Asp Thr Ile Ser Asn Ser Leu Glu Glu His Val Thr Gln Ile  
 35 40 45  
 Leu Asn Glu Gln Ala Asp Ile Ser Ser Lys Lys Glu Asp Ser His Ile  
 50 55 60  
 Gly Lys Asp Glu Glu Ile Pro Asp Ser Ser Lys Ile Ser Leu Ser Cys



65	70	75	80
Lys Lys Thr Gly Ser Lys Lys Lys Ser Ser Gln Ser Glu Gly Ile Phe			
	85	90	95
Leu Gly Ser Glu Ser Asp Glu Asp Ser Val Arg Thr Ser Ser Ser Gln			
	100	105	110
Arg Ser His Asp Leu Lys Phe Ser Ala Ser Ile Glu Lys Glu Arg Asp			
	115	120	125
Phe Lys Lys Ser Ser Ala Pro Leu Lys Ser Glu Asp Leu Gly Lys Pro			
	130	135	140
Ser Arg Ser Lys Thr Asp Arg Asp Asp Lys Tyr Phe Ser Tyr Ser Lys			
145	150	155	160
Leu Glu Arg Asp Thr Arg Tyr Val Ser Ser Arg Cys Arg Ser Glu Arg			
	165	170	175
Glu Arg Arg Arg Ser Arg Ser His Ser Arg Ser Glu Arg Gly Ser Arg			
	180	185	190
Thr Asn Leu Ser Tyr Ser Arg Ser Glu Arg Ser His Tyr Tyr Asp Ser			
	195	200	205
Asp Arg Arg Tyr His Arg Ser Ser Pro Tyr Arg Glu Arg Thr Arg Tyr			
	210	215	220
Ser Arg Pro Tyr Thr Asp Asn Arg Ala Arg Glu Ser Ser Asp Ser Glu			
225	230	235	240
Glu Glu Tyr Lys Lys Thr Tyr Ser Arg Arg Thr Ser Ser His Ser Ser			
	245	250	255
Ser Tyr Arg Asp Leu Arg Thr Ser Ser Tyr Ser Lys Ser Asp Arg Asp			
	260	265	270
Cys Lys Thr Glu Thr Ser Tyr Leu Glu Met Glu Arg Arg Gly Lys Tyr			
	275	280	285
Ser Ser Lys Leu Glu Arg Glu Ser Lys Arg Thr Ser Glu Asn Glu Ala			
	290	295	300

Ile Lys Arg Cys Cys Ser Pro Pro Asn Glu Leu Gly Phe Arg Arg Gly  
305 310 315 320  
Ser Ser Tyr Ser Lys His Asp Ser Ser Ala Ser Arg Tyr Lys Ser Thr  
325 330 335  
Leu Ser Lys Pro Ile Pro Lys Ser Asp Lys Phe Lys Asn Ser Phe Cys  
340 345 350  
Cys Thr Glu Leu Asn Glu Glu Ile Lys Gln Ser His Ser Phe Ser Leu  
355 360 365  
Gln Thr Pro Cys Ser Lys Gly Ser Glu Leu Arg Met Ile Asn Lys Asn  
370 375 380  
Pro Glu Arg Glu Lys Ala Gly Ser Pro Ala Pro Ser Asn Arg Leu Asn  
385 390 395 400  
Asp Ser Pro Thr Leu Lys Lys Leu Asp Glu Leu Pro Ile Phe Lys Ser  
405 410 415  
Glu Phe Ile Thr His Asp Ser His Asp Ser Ile Lys Glu Leu Asp Ser  
420 425 430  
Leu Ser Lys Val Lys Asn Asp Gln Leu Arg Ser Phe Cys Pro Ile Glu  
435 440 445  
Leu Asn Ile Asn Gly Ser Pro Gly Ala Glu Ser Asp Leu Ala Thr Phe  
450 455 460  
Cys Thr Ser Lys Thr Asp Ala Val Leu Met Thr Ser Asp Asp Ser Val  
465 470 475 480  
Thr Gly Ser Glu Leu Ser Pro Leu Val Lys Ala Cys Met Leu Ser Ser  
485 490 495  
Asn Gly Phe Gln Asn Ile Ser Arg Cys Lys Glu Lys Asp Leu Asp Asp  
500 505 510  
Thr Cys Met Leu His Lys Lys Ser Glu Ser Pro Phe Arg Glu Thr Glu  
515 520 525  
Pro Leu Val Ser Pro His Gln Asp Lys Leu Met Ser Met Pro Val Met

530 535 540  
Thr Val Asp Tyr Ser Lys Thr Val Val Lys Glu Pro Val Asp Thr Arg  
545 550 555 560  
Val Ser Cys Cys Lys Thr Lys Asp Ser Asp Ile Tyr Cys Thr Leu Asn  
565 570 575  
Asp Ser Asn Pro Ser Leu Cys Asn Ser Glu Ala Glu Asn Ile Glu Pro  
580 585 590  
Ser Val Met Lys Ile Ser Ser Asn Ser Phe Met Asn Val His Leu Glu  
595 600 605  
Ser Lys Pro Val Ile Cys Asp Ser Arg Asn Leu Thr Asp His Ser Lys  
610 615 620  
Phe Ala Cys Glu Glu Tyr Lys Gln Ser Ile Gly Ser Thr Ser Ser Ala  
625 630 635 640  
Ser Val Asn His Phe Asp Asp Leu Tyr Gln Pro Ile Gly Ser Ser Gly  
645 650 655  
Ile Ala Ser Ser Leu Gln Ser Leu Pro Pro Gly Ile Lys Val Asp Ser  
660 665 670  
Leu Thr Leu Leu Lys Cys Gly Glu Asn Thr Ser Pro Val Leu Asp Ala  
675 680 685  
Val Leu Lys Ser Lys Lys Ser Ser Glu Phe Leu Lys His Ala Gly Lys  
690 695 700  
Glu Thr Ile Val Glu Val Gly Ser Asp Leu Pro Asp Ser Gly Lys Gly  
705 710 715 720  
Phe Ala Ser Arg Glu Asn Arg Arg Asn Asn Gly Leu Ser Gly Lys Cys  
725 730 735  
Leu Gln Glu Ala Gln Glu Glu Gly Asn Ser Ile Leu Pro Glu Arg Arg  
740 745 750  
Gly Arg Pro Glu Ile Ser Leu Asp Glu Arg Gly Glu Gly Gly His Val  
755 760 765

His Thr Ser Asp Asp Ser Glu Val Val Phe Ser Ser Cys Asp Leu Asn  
770 775 780  
Leu Thr Met Glu Asp Ser Asp Gly Val Thr Tyr Ala Leu Lys Cys Asp  
785 790 795 800  
Ser Ser Gly His Ala Pro Glu Ile Val Ser Thr Val His Glu Asp Tyr  
805 810 815  
Ser Gly Ser Ser Glu Ser Ser Asn Asp Glu Ser Asp Ser Glu Asp Thr  
820 825 830  
Asp Ser Asp Asp Ser Ser Ile Pro Arg Asn Arg Leu Gln Ser Val Val  
835 840 845  
Val Val Pro Lys Asn Ser Thr Leu Pro Ile Glu Glu Thr Ser Pro Cys  
850 855 860  
Ser Ser Arg Ser Ser Gln Ser Tyr Arg His Tyr Ser Asp His Trp Glu  
865 870 875 880  
Asp Glu Arg Leu Glu Ser Arg Arg His Leu Tyr Glu Glu Lys Phe Glu  
885 890 895  
Ser Ile Ala Ser Lys Ala Cys Pro Gln Thr Asp Lys Phe Phe Leu His  
900 905 910  
Lys Gly Thr Glu Lys Asn Pro Glu Ile Ser Phe Thr Gln Ser Ser Arg  
915 920 925  
Lys Gln Ile Asp Asn Arg Leu Pro Glu Leu Ser His Pro Gln Ser Asp  
930 935 940  
Gly Val Asp Ser Thr Ser His Thr Asp Val Lys Ser Asp Pro Leu Gly  
945 950 955 960  
His Pro Asn Ser Glu Glu Thr Val Lys Ala Lys Ile Pro Ser Arg Gln  
965 970 975  
Gln Glu Glu Leu Pro Ile Tyr Ser Ser Asp Phe Glu Asp Val Pro Asn  
980 985 990  
Lys Ser Trp Gln Gln Thr Thr Phe Gln Asn Arg Pro Asp Ser Arg Leu

995 1000 1005  
Gly Lys Thr Glu Leu Ser Phe Ser Ser Ser Cys Glu Ile Pro His Val  
1010 1015 1020  
Asp Gly Leu His Ser Ser Glu Glu Leu Arg Asn Leu Gly Trp Asp Phe  
1025 1030 1035 1040  
Ser Gln Glu Lys Pro Ser Thr Thr Tyr Gln Gln Pro Asp Ser Ser Tyr  
1045 1050 1055  
Gly Ala Cys Gly Gly His Lys Tyr Gln Gln Asn Ala Glu Gln Tyr Gly  
1060 1065 1070  
Gly Thr Arg Asp Tyr Trp Gln Gly Asn Gly Tyr Trp Asp Pro Arg Ser  
1075 1080 1085  
Gly Arg Pro Pro Gly Thr Gly Val Val Tyr Asp Arg Thr Gln Gly Gln  
1090 1095 1100  
Val Pro Asp Ser Leu Thr Asp Asp Arg Glu Glu Glu Glu Asn Trp Asp  
1105 1110 1115 1120  
Gln Gln Asp Gly Ser His Phe Ser Asp Gln Ser Asp Lys Phe Leu Leu  
1125 1130 1135  
Ser Leu Gln Lys Asp Lys Gly Ser Val Gln Ala Pro Glu Ile Ser Ser  
1140 1145 1150  
Asn Ser Ile Lys Asp Thr Leu Ala Val Asn  
1155 1160

&lt;210&gt; 3042

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3042

Met Ala Gly Pro Gly Leu Gly Pro Gly Pro Gly His Ser Glu Gly Thr  
 1 5 10 15  
 Ala Lys Ala Lys Ala Trp Ser Arg Gln Val Gln Gly Arg Ser Arg Glu  
 20 25 30  
 Arg Pro Ala Pro Ser Arg Ala Lys Ala Gln Ala Ala Gln Gly Lys Ala  
 35 40 45  
 Gly Gln Trp His His Trp Ala Met Thr Gly Gln Gly Gln Cys Gln Glu  
 50 55 60  
 Arg Ala Glu Gln Ala Gly Pro Trp Trp Gly Gln Gly Arg Asp Gly Pro  
 65 70 75 80  
 Lys Gln Gly Gln Asp Ile Ser Lys Ala Arg Ser Gly Pro Glu Gln Glu  
 85 90 95  
 Gln Asp His Asp His Trp Gln Gly Ser Ala Met Thr Gly Pro Gly Ser  
 100 105 110  
 Gly Gln Gly Ala Gly Pro Glu Pro Arg Ser Gly Gln Cys Arg Phe Thr  
 115 120 125  
 Ala Gly Pro Val Pro Gly Gln Asp Gln Gly Arg Asp Arg Val Ala Gln  
 130 135 140  
 Gly Gln Asp Arg Val Arg Met Gly Pro Glu Gln Asp Arg Ala Glu Ser  
 145 150 155 160  
 Pro Gly Asn Ser Arg Ala Gly Thr Gly Gln Gly Arg Ala Val Gln Gly  
 165 170 175  
 Gln Ile His Gly Arg Arg Arg Ala Lys Pro Gly Pro Leu Pro Met His  
 180 185 190  
 Gln Pro Ser Leu Gln Gly Ser Tyr His Leu Val Thr Ala Ala Ala Arg  
 195 200 205  
 Pro Leu Leu  
 210

&lt;210&gt; 3043

&lt;211&gt; 1018

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3043

Met Asn Leu Gln Ala Gln Pro Lys Ala Gln Asn Lys Arg Lys Arg Cys

1 5 10 15

Leu Phe Gly Gly Gln Glu Pro Ala Pro Lys Glu Gln Pro Pro Pro Leu

20 25 30

Gln Pro Pro Gln Gln Ser Ile Arg Val Lys Glu Glu Gln Tyr Leu Gly

35 40 45

His Glu Gly Pro Gly Gly Ala Val Ser Thr Ser Gln Pro Val Glu Leu

50 55 60

Pro Pro Pro Ser Ser Leu Ala Leu Leu Asn Ser Val Val Tyr Gly Pro

65 70 75 80

Glu Arg Thr Ser Ala Ala Met Leu Ser Gln Gln Val Ala Ser Val Lys

85 90 95

Trp Pro Asn Ser Val Met Ala Pro Gly Arg Gly Pro Glu Arg Gly Gly

100 105 110

Gly Gly Gly Val Ser Asp Ser Ser Trp Gln Gln Gln Pro Gly Gln Pro

115 120 125

Pro Pro His Ser Thr Trp Asn Cys His Ser Leu Ser Leu Tyr Ser Ala

130 135 140

Thr Lys Gly Ser Pro His Pro Gly Val Gly Val Pro Thr Tyr Tyr Asn

145 150 155 160

His Pro Glu Ala Leu Lys Arg Glu Lys Ala Gly Gly Pro Gln Leu Asp

165 170 175

Arg Tyr Val Arg Pro Met Met Pro Gln Lys Val Gln Leu Glu Val Gly  
180 185 190  
Arg Pro Gln Ala Pro Leu Asn Ser Phe His Ala Ala Lys Lys Pro Pro  
195 200 205  
Asn Gln Ser Leu Pro Leu Gln Pro Phe Gln Leu Ala Phe Gly His Gln  
210 215 220  
Val Asn Arg Gln Val Phe Arg Gln Gly Pro Pro Pro Pro Asn Pro Val  
225 230 235 240  
Ala Ala Phe Pro Pro Gln Lys Gln Gln Gln Gln Gln Gln Pro Gln Gln  
245 250 255  
Gln Gln Gln Gln Gln Gln Ala Ala Leu Pro Gln Met Pro Leu Phe Glu  
260 265 270  
Asn Phe Tyr Ser Met Pro Gln Gln Pro Ser Gln Gln Pro Gln Asp Phe  
275 280 285  
Gly Leu Gln Pro Ala Gly Pro Leu Gly Gln Ser His Leu Ala His His  
290 295 300  
Ser Met Ala Pro Tyr Pro Phe Pro Pro Asn Pro Asp Met Asn Pro Glu  
305 310 315 320  
Leu Arg Lys Ala Leu Leu Gln Asp Ser Ala Pro Gln Pro Ala Leu Pro  
325 330 335  
Gln Val Gln Ile Pro Phe Pro Arg Arg Ser Arg Arg Leu Ser Lys Glu  
340 345 350  
Gly Ile Leu Pro Pro Ser Ala Leu Asp Gly Ala Gly Thr Gln Pro Gly  
355 360 365  
Gln Glu Ala Thr Gly Asn Leu Phe Leu His His Trp Pro Leu Gln Gln  
370 375 380  
Pro Pro Pro Gly Ser Leu Gly Gln Pro His Pro Glu Ala Leu Gly Phe  
385 390 395 400  
Pro Leu Glu Leu Arg Glu Ser Gln Leu Leu Pro Asp Gly Glu Arg Leu



405	410	415
Ala Pro Asn Gly Arg Glu Arg Glu Ala Pro Ala Met Gly Ser Glu Glu		
420	425	430
Gly Met Arg Ala Val Ser Thr Gly Asp Cys Gly Gln Val Leu Arg Gly		
435	440	445
Gly Val Ile Gln Ser Thr Arg Arg Arg Arg Arg Ala Ser Gln Glu Ala		
450	455	460
Asn Leu Leu Thr Leu Ala Gln Lys Ala Val Glu Leu Ala Ser Leu Gln		
465	470	475
Asn Ala Lys Asp Gly Ser Gly Ser Glu Glu Lys Arg Lys Ser Val Leu		
485	490	495
Ala Ser Thr Thr Lys Cys Gly Val Glu Phe Ser Glu Pro Ser Leu Ala		
500	505	510
Thr Lys Arg Ala Arg Glu Asp Ser Gly Met Val Pro Leu Ile Ile Pro		
515	520	525
Val Ser Val Pro Val Arg Thr Val Asp Pro Thr Glu Ala Ala Gln Ala		
530	535	540
Gly Gly Leu Asp Glu Asp Gly Lys Gly Pro Glu Gln Asn Pro Ala Glu		
545	550	555
560		
His Lys Pro Ser Val Ile Val Thr Arg Arg Arg Ser Thr Arg Ile Pro		
565	570	575
Gly Thr Asp Ala Gln Ala Gln Ala Glu Asp Met Asn Val Lys Leu Glu		
580	585	590
Gly Glu Pro Ser Val Arg Lys Pro Lys Gln Arg Pro Arg Pro Glu Pro		
595	600	605
Leu Ile Ile Pro Thr Lys Ala Gly Thr Phe Ile Ala Pro Pro Val Tyr		
610	615	620
Ser Asn Ile Thr Pro Tyr Gln Ser His Leu Arg Ser Pro Val Arg Leu		
625	630	635
		640

Ala Asp His Pro Ser Glu Arg Ser Phe Glu Leu Pro Pro Tyr Thr Pro  
645 650 655  
Pro Pro Ile Leu Ser Pro Val Arg Glu Gly Ser Gly Leu Tyr Phe Asn  
660 665 670  
Ala Ile Ile Ser Thr Ser Thr Ile Pro Ala Pro Pro Pro Ile Thr Pro  
675 680 685  
Lys Ser Ala His Arg Thr Leu Leu Arg Thr Asn Ser Ala Glu Val Thr  
690 695 700  
Pro Pro Val Leu Ser Val Met Gly Glu Ala Thr Pro Val Ser Ile Glu  
705 710 715 720  
Pro Arg Ile Asn Val Gly Ser Arg Phe Gln Ala Glu Ile Pro Leu Met  
725 730 735  
Arg Asp Arg Ala Leu Ala Ala Ala Asp Pro His Lys Ala Asp Leu Val  
740 745 750  
Trp Gln Pro Trp Glu Asp Leu Glu Ser Ser Arg Glu Lys Gln Arg Gln  
755 760 765  
Val Glu Asp Leu Leu Thr Ala Ala Cys Ser Ser Ile Phe Pro Gly Ala  
770 775 780  
Gly Thr Asn Gln Glu Leu Ala Leu His Cys Leu His Glu Ser Arg Gly  
785 790 795 800  
Asp Ile Leu Glu Thr Leu Asn Lys Leu Leu Leu Lys Lys Pro Leu Arg  
805 810 815  
Pro His Asn His Pro Leu Ala Thr Tyr His Tyr Thr Gly Ser Asp Gln  
820 825 830  
Trp Lys Met Ala Glu Arg Lys Leu Phe Asn Lys Gly Ile Ala Ile Tyr  
835 840 845  
Lys Lys Asp Phe Phe Leu Val Gln Lys Leu Ile Gln Thr Lys Thr Val  
850 855 860  
Ala Gln Cys Val Glu Phe Tyr Tyr Thr Tyr Lys Lys Gln Val Lys Ile

15

Ser Cys Pro Gly Ser Ser Gly Arg Arg Val Ala Val Leu His His His  
 20 25 30  
 Gly Val Ala Val His Gln Leu Gln His Leu Leu Gln Val Val His Ala  
 35 40 45  
 His Asp Ala Ser Ser Thr Gly Leu Gly Ser Trp Leu His Asp Pro Asp  
 50 55 60  
 Val Ala Ile Pro Phe His Val Tyr Leu Gly Tyr His Gly Leu Gln Leu  
 65 70 75 80  
 Leu Gln Asp Val Leu Thr Ala Leu Asp Leu Ser Val Glu Val Pro Glu  
 85 90 95  
 Phe Cys Pro Phe Val Asp His Leu Val Val Ala Leu Glu Glu Glu Gly  
 100 105 110  
 Pro Ala Leu Gly Gly Glu Val Gln Arg Gly Leu Gln Val Leu Val Asp  
 115 120 125  
 Val His Val Gly Gln Val Ala Lys Val Leu Leu Ala Arg Thr Gln Ser  
 130 135 140  
 Phe Ile His Lys Leu Trp Gly His Gln His Trp Val Phe Leu Leu Phe  
 145 150 155 160  
 Leu Gly Leu Leu Val Ser Cys Thr  
 165

&lt;210&gt; 3045

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3045

Met Trp Val Asp Pro Pro Gln His His Thr Gln Asn Leu Ser Leu Ser

1                      5                      10                      15  
 Gln Leu Gln Trp Ala Leu Ser Val Ser Ser Arg Gly Gly Phe Gln Ser  
                     20                      25                      30  
 Gly Lys Glu Arg Gly Gln Phe Leu Leu Phe Pro Glu Ser His Pro Ser  
                     35                      40                      45  
 Met Ser Arg Thr His Pro Thr Leu Ser Leu Leu Thr Arg Ser Ser Gly  
                     50                      55                      60  
 Val His Arg Ala Cys Thr Leu Ala Pro Pro Glu Arg Leu Leu Gln Gln  
 65                      70                      75                      80  
 Val His Ala Gln Ala Pro Arg Gly Pro Ser Glu Ser Glu Leu Leu Val  
                     85                      90                      95  
 Phe Lys Met Leu Glu Cys Cys Thr His Gly Pro Gly Cys Asp Leu Gly  
                     100                      105                      110  
 Ile Ser Ile Phe Gln Glu Leu Leu Arg Cys Phe Tyr Ala Ala Gly Gln  
                     115                      120                      125  
 Ser Met Asn Thr  
                     130

<210> 3046

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3046

Met Gly Gly Ile Trp His Arg Gly Val Leu Gly Leu Trp Phe Ser Thr  
 1                      5                      10                      15  
 Leu Ile Asn Gly Ile Asp Phe Phe Cys Phe Cys Phe Cys Phe Lys Arg  
                     20                      25                      30

Arg Glu Leu Val Pro Phe Ser Val Ser Arg Ile Glu Asn Met Lys Ala  
                   35                                  40                                  45  
 Lys Lys Arg Asn Ser Gln Tyr Val Ile Asn Phe Gly Leu Ser Ile Leu  
                   50                                  55                                  60  
 Val Glu Arg Ile Asn Gly Ala Lys Asn Pro Lys Gly Leu Asp Asn Pro  
                   65                                  70                                  75                                  80  
 His Ile Arg Leu Pro Asp Tyr Val Leu Leu Thr Leu Thr Phe Arg Ser  
                                   85                                  90                                  95  
 Val Glu Thr Leu Pro His Leu Gly Arg Gly Arg Asp Lys Asp Pro Leu  
                                   100                                  105                                  110  
 Leu Leu Val Leu Asp Ser His Ile Met Pro Ser Ile Tyr Cys Phe Gln  
                                   115                                  120                                  125  
 Glu Ile Thr Cys Phe  
                                   130

<210> 3047

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3047

Met Thr Glu Pro Gly His Ser Arg Ser Ala Val Tyr Pro Leu Leu Tyr  
           1                                  5                                  10                                  15  
 Arg Asp Gly Glu Gln Thr Glu Pro Ser Arg Met Gly Ser Lys Ser Pro  
                                   20                                  25                                  30  
 Gly Asn Thr Ser Gln Pro Pro Ala Phe Phe Ser Lys Leu Thr Glu Ser  
                                   35                                  40                                  45  
 Asn Ser Ala Met Val Lys Ser Lys Lys Gln Glu Ile Asn Lys Lys Leu

50	55	60
Asn Thr His Asn Arg Asn Glu Pro Glu Tyr Ser Lys Gly Pro Ala Gly		
65	70	75
Ser Arg Gly Ser Met Gly Pro Gln Val Gly Gly Trp Pro Ala Trp Ala		
85	90	95
Ala Gly Ala Ala Gln Trp Gln Lys Pro Thr Val His Leu Arg Lys Leu		
100	105	110
Ser Gly Pro Ala Asp His Leu Pro Pro Gly Pro Leu Pro His Ile Trp		
115	120	125
Gly Ala Pro Gly Gln Phe Leu Asp Leu Leu Gly Phe Pro		
130	135	140

&lt;210&gt; 3048

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3048

Met Leu Leu Ser Thr Phe Ser His Ala Tyr Trp Pro Phe Phe Met Phe		
1	5	10
Leu Lys Lys Cys Leu Phe Ile Phe Cys Pro Phe Leu Asn Cys Val Val		
20	25	30
Phe Leu Leu Ser Cys Lys Ser Gly Tyr Ile Val Trp Asn Met Cys Ser		
35	40	45
Leu Ser Asp Ile Gly Leu Ile Ser Phe Cys Pro Ile Leu Trp Leu Ser		
50	55	60
Leu Phe Ser Tyr Val Thr Phe Val Leu Val Cys Phe His Ala Ala Asp		
65	70	75
		80

Lys Asp Ile Pro Glu Thr Gly Gln Phe Thr Lys Glu Gly Gly Leu Leu  
                             85                            90                            95  
 Asp Ser Gln Phe His Val Ala Gly Glu Thr Thr Gln Ser Trp Arg Lys  
                             100                            105                            110  
 Met Lys Gly Lys Glu Glu Gln Val Thr Ser Tyr Met Asp Gly Ser Arg  
                             115                            120                            125  
 Gln Ser Glu Ser Leu Cys Arg Glu Thr Leu Ile Phe Lys Thr Ile Arg  
                             130                            135                            140  
 Ser Arg Glu Thr His Ser Leu Ser  
                             145                            150

&lt;210&gt; 3049

&lt;211&gt; 708

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3049

Met Val Val Val Thr Gly Arg Glu Pro Asp Ser Arg Arg Gln Asp Gly  
           1                            5                            10                            15  
 Ala Met Ser Ser Ser Asp Ala Glu Asp Asp Phe Leu Glu Pro Ala Thr  
                             20                            25                            30  
 Pro Thr Ala Thr Gln Ala Gly His Ala Leu Pro Leu Leu Pro Gln Glu  
                             35                            40                            45  
 Arg Cys Ala Glu Phe Pro Ala Leu Arg Gly Pro Pro Thr Gln Gly Ala  
                             50                            55                            60  
 Cys Ser Ser Cys Val Gln Arg Gly Pro Val Leu Cys His Arg Ala Pro  
                             65                            70                            75                            80  
 Pro Gly Ala Ala Gly Glu His Ala Ala Thr Glu Gly Arg Glu Gly Ala



85	90	95
Pro Ser Val Ser Gly Thr His Ala Leu Leu Gln Arg Pro Leu Gly Ala		
100	105	110
Asp Cys Gly Asp Arg Pro Ala Ala Cys Gly Pro Ala Glu Gly Pro Leu		
115	120	125
Cys Gln Ala Gln Val Val Ser Arg Lys Lys Met Ser Leu Lys Ser Glu		
130	135	140
Arg Arg Gly Ile His Val Asp Gln Ser Asp Leu Leu Cys Lys Lys Gly		
145	150	155
Cys Gly Tyr Tyr Gly Asn Pro Ala Trp Gln Gly Phe Cys Ser Lys Cys		
165	170	175
Trp Arg Glu Glu Tyr His Lys Ala Arg Gln Lys Gln Ile Gln Glu Asp		
180	185	190
Trp Glu Leu Ala Glu Arg Val Leu Leu Cys Cys Pro Gly Trp Ser Ala		
195	200	205
Met Val Gln Phe Gln Leu Thr Ala Thr Ser Ala Ser Trp Ala Gln Val		
210	215	220
Ile Leu Leu Leu Gln Pro Pro Lys Trp Leu Gly Leu Gln Lys Leu Gln		
225	230	235
Arg Glu Glu Glu Glu Ala Phe Ala Ser Ser Gln Ser Ser Gln Gly Ala		
245	250	255
Gln Ser Leu Thr Phe Ser Lys Phe Glu Glu Lys Lys Thr Asn Glu Lys		
260	265	270
Thr Arg Lys Val Thr Thr Val Lys Lys Phe Phe Ser Ala Ser Ser Arg		
275	280	285
Val Gly Ser Lys Lys Glu Ile Gln Glu Ala Lys Ala Pro Ser Pro Ser		
290	295	300
Ile Asn Arg Gln Thr Ser Ile Glu Thr Asp Arg Val Ser Lys Glu Phe		
305	310	315
		320

Ile Glu Phe Leu Lys Thr Phe His Lys Thr Gly Gln Glu Ile Tyr Lys  
325 330 335  
Gln Thr Lys Leu Phe Leu Glu Gly Met His Tyr Lys Arg Asp Leu Ser  
340 345 350  
Ile Glu Glu Gln Ser Glu Cys Ala Gln Asp Phe Tyr His Asn Val Ala  
355 360 365  
Glu Arg Met Gln Thr Arg Gly Lys Glu Arg Arg Phe His His Val Gly  
370 375 380  
Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Ser Ala  
385 390 395 400  
Ser Gln Ser Ala Gly Asn Thr Gly Val Glu Pro Pro His Pro Ala Val  
405 410 415  
Pro Pro Glu Arg Val Glu Lys Ile Met Asp Gln Ile Glu Lys Tyr Ile  
420 425 430  
Met Thr Arg Leu Tyr Lys Tyr Val Phe Cys Pro Glu Thr Thr Asp Asp  
435 440 445  
Glu Lys Lys Asp Leu Ala Ile Gln Lys Arg Ile Arg Ala Leu Arg Trp  
450 455 460  
Val Thr Pro Gln Met Leu Cys Val Pro Val Asn Asp Asp Ile Pro Glu  
465 470 475 480  
Val Ser Asp Met Val Val Lys Ala Ile Thr Asp Ile Ile Glu Met Asp  
485 490 495  
Ser Lys Arg Val Pro Arg Asp Lys Leu Ala Cys Ile Thr Lys Cys Ser  
500 505 510  
Lys His Ile Phe Asn Ala Ile Lys Ile Thr Lys Asn Glu Pro Ala Ser  
515 520 525  
Ala Asp Asp Phe Leu Pro Thr Leu Ile Tyr Ile Val Leu Lys Gly Asn  
530 535 540  
Pro Pro Arg Leu Gln Ser Asn Ile Gln Tyr Ile Thr Arg Phe Cys Asn

545                      550                      555                      560  
Pro Ser Arg Leu Met Thr Gly Glu Asp Gly Tyr Tyr Phe Thr Asn Leu  
                         565                      570                      575  
Cys Cys Ala Val Ala Phe Ile Glu Lys Leu Asp Ala Gln Ser Leu Asn  
                         580                      585                      590  
Leu Ser Gln Glu Asp Phe Asp Arg Tyr Met Ser Gly Gln Thr Ser Pro  
                         595                      600                      605  
Arg Lys Gln Glu Ala Glu Ser Trp Ser Pro Asp Ala Cys Leu Gly Val  
                         610                      615                      620  
Lys Gln Met Tyr Lys Asn Leu Asp Leu Leu Ser Gln Leu Asn Glu Arg  
625                      630                      635                      640  
Gln Glu Arg Ile Met Asn Glu Ala Lys Lys Leu Glu Lys Asp Leu Ile  
                         645                      650                      655  
Asp Trp Thr Asp Gly Ile Ala Arg Glu Val Gln Asp Ile Val Glu Lys  
                         660                      665                      670  
Tyr Pro Leu Glu Ile Lys Pro Pro Asn Gln Pro Leu Ala Ala Ile Asp  
                         675                      680                      685  
Ser Glu Asn Val Glu Asn Asp Lys Leu Pro Pro Pro Leu Gln Pro Gln  
                         690                      695                      700  
Val Tyr Ala Gly  
705

&lt;210&gt; 3050

&lt;211&gt; 1558

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3050

Met Val Asp Asn Ile Ile Ile Ala Cys Gly Gly Ile Leu Pro Leu Leu  
1 5 10 15  
Ser Ala Ala Thr Ser Pro Thr Gly Ser Lys Thr Glu Leu Glu Asn Ile  
20 25 30  
Glu Val Thr Gln Gly Met Ser Ala Glu Thr Ala Val Thr Phe Leu Ser  
35 40 45  
Arg Leu Met Ala Met Val Asp Val Leu Val Phe Ala Ser Ser Leu Asn  
50 55 60  
Phe Ser Glu Ile Glu Ala Glu Lys Asn Met Ser Ser Gly Gly Leu Met  
65 70 75 80  
Arg Gln Cys Leu Arg Leu Val Cys Cys Val Ala Val Arg Asn Cys Leu  
85 90 95  
Glu Cys Arg Gln Arg Gln Arg Asp Arg Gly Asn Lys Ser Ser His Gly  
100 105 110  
Ser Ser Lys Pro Gln Glu Val Pro Gln Ser Val Thr Ala Thr Ala Ala  
115 120 125  
Ser Lys Thr Pro Leu Glu Asn Val Pro Gly Asn Leu Ser Pro Ile Lys  
130 135 140  
Asp Pro Asp Arg Leu Leu Gln Asp Val Asp Ile Asn Arg Leu Arg Ala  
145 150 155 160  
Val Val Phe Arg Asp Val Asp Asp Ser Lys Gln Ala Gln Phe Leu Ala  
165 170 175  
Leu Ala Val Val Tyr Phe Ile Ser Val Leu Met Val Ser Lys Tyr Arg  
180 185 190  
Asp Ile Leu Glu Pro Gln Arg Glu Thr Thr Arg Thr Gly Ser Gln Pro  
195 200 205  
Gly Arg Asn Ile Arg Gln Glu Ile Asn Ser Pro Thr Ser Thr Val Val  
210 215 220  
Val Ile Pro Ser Ile Pro His Pro Ser Leu Asn His Gly Phe Leu Ala

225	230	235	240
Lys Leu Ile Pro Glu Gln Ser Phe Gly His Ser Phe Tyr Lys Glu Thr			
	245	250	255
Pro Ala Ala Phe Pro Asp Thr Ile Lys Glu Lys Glu Thr Pro Thr Pro			
	260	265	270
Gly Glu Asp Ile Gln Val Glu Ser Ser Ile Pro His Thr Asp Ser Gly			
	275	280	285
Ile Gly Glu Glu Gln Val Ala Ser Ile Leu Asn Gly Ala Glu Leu Glu			
	290	295	300
Thr Ser Thr Gly Pro Asp Ala Met Ser Glu Leu Leu Ser Thr Leu Ser			
305	310	315	320
Ser Glu Val Lys Lys Ser Gln Glu Ser Leu Thr Glu Asn Pro Ser Glu			
	325	330	335
Thr Leu Lys Pro Ala Thr Ser Ile Ser Ser Ile Ser Gln Thr Lys Gly			
	340	345	350
Ile Asn Val Lys Glu Ile Leu Lys Ser Leu Val Ala Ala Pro Val Glu			
	355	360	365
Ile Ala Glu Cys Gly Pro Glu Pro Ile Pro Tyr Pro Asp Pro Ala Leu			
	370	375	380
Lys Arg Glu Thr Gln Ala Ile Leu Pro Met Gln Phe His Ser Phe Asp			
385	390	395	400
Arg Ser Val Val Val Pro Val Lys Lys Pro Pro Pro Gly Ser Leu Ala			
	405	410	415
Val Thr Thr Val Gly Ala Thr Thr Ala Gly Ser Gly Leu Pro Thr Gly			
	420	425	430
Ser Thr Ser Asn Ile Phe Ala Ala Thr Gly Ala Thr Pro Lys Ser Met			
	435	440	445
Ile Asn Thr Thr Gly Ala Val Asp Ser Gly Ser Ser Ser Ser Ser Ser			
	450	455	460

Ser Ser Ser Phe Val Asn Gly Ala Thr Ser Lys Asn Leu Pro Ala Val  
 465 470 475 480  
 Gln Thr Val Ala Pro Met Pro Glu Asp Ser Ala Glu Asn Met Ser Ile  
 485 490 495  
 Thr Ala Lys Leu Glu Arg Ala Leu Glu Lys Val Ala Pro Leu Leu Arg  
 500 505 510  
 Glu Ile Phe Val Asp Phe Ala Pro Phe Leu Ser Arg Thr Leu Leu Gly  
 515 520 525  
 Ser His Gly Gln Glu Leu Leu Ile Glu Gly Leu Val Cys Met Lys Ser  
 530 535 540  
 Ser Thr Ser Val Val Glu Leu Val Met Leu Leu Cys Ser Gln Glu Trp  
 545 550 555 560  
 Gln Asn Ser Ile Gln Lys Asn Ala Gly Leu Ala Phe Ile Glu Leu Ile  
 565 570 575  
 Asn Glu Gly Arg Leu Leu Cys His Ala Met Lys Asp His Ile Val Arg  
 580 585 590  
 Val Ala Asn Glu Ala Glu Phe Ile Leu Asn Arg Gln Arg Ala Glu Asp  
 595 600 605  
 Val His Lys His Ala Glu Phe Glu Ser Gln Cys Ala Gln Tyr Ala Ala  
 610 615 620  
 Asp Arg Arg Glu Glu Glu Lys Met Cys Asp His Leu Ile Ser Ala Ala  
 625 630 635 640  
 Lys His Arg Asp His Val Thr Ala Asn Gln Leu Lys Gln Lys Ile Leu  
 645 650 655  
 Asn Ile Leu Thr Asn Lys His Gly Ala Trp Gly Ala Val Ser His Ser  
 660 665 670  
 Gln Leu His Asp Phe Trp Arg Leu Asp Tyr Trp Glu Asp Asp Leu Arg  
 675 680 685  
 Arg Arg Arg Arg Phe Val Arg Asn Ala Phe Gly Ser Thr His Ala Glu

690 695 700  
Ala Leu Leu Lys Ala Ala Ile Glu Tyr Gly Thr Glu Glu Asp Val Val  
705 710 715 720  
Lys Ser Lys Lys Thr Phe Arg Ser Gln Ala Ile Val Asn Gln Asn Ala  
725 730 735  
Glu Thr Glu Leu Met Leu Glu Gly Asp Asp Asp Ala Val Ser Leu Leu  
740 745 750  
Gln Glu Lys Glu Ile Asp Asn Leu Ala Gly Pro Val Val Leu Ser Thr  
755 760 765  
Pro Ala Gln Leu Ile Ala Pro Val Val Val Ala Lys Gly Thr Leu Ser  
770 775 780  
Ile Thr Thr Thr Glu Ile Tyr Phe Glu Val Asp Glu Asp Asp Ser Ala  
785 790 795 800  
Phe Lys Lys Ile Asp Thr Lys Val Leu Ala Tyr Thr Glu Gly Leu His  
805 810 815  
Gly Lys Trp Met Phe Ser Glu Ile Arg Ala Val Phe Ser Arg Arg Tyr  
820 825 830  
Leu Leu Gln Asn Thr Ala Leu Glu Val Phe Met Ala Asn Arg Thr Ser  
835 840 845  
Val Met Phe Asn Phe Pro Gly Gln Ala Thr Val Lys Lys Val Val Tyr  
850 855 860  
Ser Leu Pro Arg Val Gly Val Gly Thr Ser Tyr Gly Leu Pro Gln Ala  
865 870 875 880  
Arg Arg Ile Ser Leu Ala Thr Pro Arg Gln Leu Tyr Lys Ser Ser Asn  
885 890 895  
Met Thr Gln Arg Trp Gln Arg Arg Glu Ile Ser Asn Phe Glu Tyr Leu  
900 905 910  
Met Phe Leu Asn Thr Ile Ala Gly Arg Thr Tyr Asn Asp Leu Asn Gln  
915 920 925

Tyr Pro Val Phe Pro Trp Val Leu Thr Asn Tyr Glu Ser Glu Glu Leu  
930 935 940  
Asp Leu Thr Leu Pro Gly Asn Phe Arg Asp Leu Ser Lys Pro Ile Gly  
945 950 955 960  
Ala Leu Asn Pro Lys Arg Ala Val Phe Tyr Ala Glu Arg Tyr Glu Thr  
965 970 975  
Trp Glu Asp Asp Gln Ser Pro Pro Tyr His Tyr Asn Thr His Tyr Ser  
980 985 990  
Thr Ala Thr Ser Thr Leu Ser Trp Leu Val Arg Ile Glu Pro Phe Thr  
995 1000 1005  
Thr Phe Phe Leu Asn Ala Asn Asp Gly Lys Phe Asp His Pro Asp Arg  
1010 1015 1020  
Thr Phe Ser Ser Val Ala Arg Ser Trp Arg Thr Ser Gln Arg Asp Thr  
1025 1030 1035 1040  
Ser Asp Val Lys Glu Leu Ile Pro Glu Phe Tyr Tyr Leu Pro Glu Met  
1045 1050 1055  
Phe Val Asn Ser Asn Gly Tyr Asn Leu Gly Val Arg Glu Asp Glu Val  
1060 1065 1070  
Val Val Asn Asp Val Asp Leu Pro Pro Trp Ala Lys Lys Pro Glu Asp  
1075 1080 1085  
Phe Val Arg Ile Asn Arg Met Ala Leu Glu Ser Glu Phe Val Ser Cys  
1090 1095 1100  
Gln Leu His Gln Trp Ile Asp Leu Ile Phe Gly Tyr Lys Gln Arg Gly  
1105 1110 1115 1120  
Pro Glu Ala Val Arg Ala Leu Asn Val Phe His Tyr Leu Thr Tyr Glu  
1125 1130 1135  
Gly Ser Val Asn Leu Asp Ser Ile Thr Asp Pro Val Leu Arg Glu Ala  
1140 1145 1150  
Met Glu Ala Gln Ile Gln Asn Phe Gly Gln Thr Pro Ser Gln Leu Leu



1155 1160 1165  
Ile Glu Pro His Pro Pro Arg Ser Ser Ala Met His Leu Cys Phe Leu  
1170 1175 1180  
Pro Gln Ser Pro Leu Met Phe Lys Asp Gln Met Gln Gln Asp Val Ile  
1185 1190 1195 1200  
Met Val Leu Lys Phe Pro Ser Asn Ser Pro Val Thr His Val Ala Ala  
1205 1210 1215  
Asn Thr Leu Pro His Leu Thr Ile Pro Ala Val Val Thr Val Thr Cys  
1220 1225 1230  
Ser Arg Leu Phe Ala Val Asn Arg Trp His Asn Thr Val Gly Leu Arg  
1235 1240 1245  
Gly Ala Pro Gly Tyr Ser Leu Asp Gln Ala His His Leu Pro Ile Glu  
1250 1255 1260  
Met Asp Pro Leu Ile Ala Asn Asn Ser Gly Val Asn Lys Arg Gln Ile  
1265 1270 1275 1280  
Thr Asp Leu Val Asp Gln Ser Ile Gln Ile Asn Ala His Cys Phe Val  
1285 1290 1295  
Val Thr Ala Asp Asn Arg Tyr Ile Leu Ile Cys Gly Phe Trp Asp Lys  
1300 1305 1310  
Ser Phe Arg Val Tyr Ser Thr Glu Thr Gly Lys Leu Thr Gln Ile Val  
1315 1320 1325  
Phe Gly His Trp Asp Val Val Thr Cys Leu Ala Arg Ser Glu Ser Tyr  
1330 1335 1340  
Ile Gly Gly Asp Cys Tyr Ile Val Ser Gly Ser Arg Asp Ala Thr Leu  
1345 1350 1355 1360  
Leu Leu Trp Tyr Trp Ser Gly Arg His His Ile Ile Gly Asp Asn Pro  
1365 1370 1375  
Asn Ser Ser Asp Tyr Pro Ala Pro Arg Ala Val Leu Thr Gly Tyr Asp  
1380 1385 1390

His Glu Val Val Cys Val Ser Val Cys Ala Glu Leu Gly Leu Val Ile

1395

1400

1405

Ser Gly Ala Lys Glu Gly Pro Cys Leu Val His Thr Ile Thr Gly Asp

1410

1415

1420

Leu Leu Arg Ala Leu Glu Gly Pro Glu Asn Cys Leu Phe Pro Arg Leu

1425

1430

1435

1440

Ile Ser Val Ser Ser Glu Gly His Cys Ile Ile Tyr Tyr Glu Arg Gly

1445

1450

1455

Arg Phe Ser Asn Phe Ser Ile Asn Gly Lys Leu Leu Ala Gln Met Glu

1460

1465

1470

Ile Asn Asp Ser Thr Arg Ala Ile Leu Leu Ser Ser Asp Gly Gln Asn

1475

1480

1485

Leu Val Thr Gly Gly Asp Asn Gly Val Val Glu Val Trp Gln Ala Cys

1490

1495

1500

Asp Phe Lys Gln Leu Tyr Ile Tyr Pro Gly Cys Asp Ala Gly Ile Arg

1505

1510

1515

1520

Ala Met Asp Leu Ser His Asp Gln Arg Thr Leu Ile Thr Gly Met Ala

1525

1530

1535

Ser Gly Ser Ile Val Ala Phe Asn Ile Asp Phe Asn Arg Trp His Tyr

1540

1545

1550

Glu His Gln Asn Arg Tyr

1555

&lt;210&gt; 3051

&lt;211&gt; 1223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3051

Met Met Ser Leu Ser Val Arg Pro Gln Arg Arg Leu Leu Ser Ala Arg  
1 5 10 15  
Val Asn Arg Ser Gln Ser Phe Ala Gly Val Leu Gly Ser His Glu Arg  
20 25 30  
Gly Pro Ser Leu Ser Phe Arg Ser Phe Pro Val Phe Ser Pro Pro Gly  
35 40 45  
Pro Pro Arg Lys Pro Pro Ala Leu Ser Arg Val Ser Arg Met Phe Ser  
50 55 60  
Val Ala His Pro Ala Ala Lys Val Pro Gln Pro Glu Arg Leu Asp Leu  
65 70 75 80  
Val Tyr Thr Ala Leu Lys Arg Gly Leu Thr Ala Tyr Leu Glu Val His  
85 90 95  
Gln Gln Glu Gln Glu Lys Leu Gln Gly Gln Ile Arg Glu Ser Lys Arg  
100 105 110  
Asn Ser Arg Leu Gly Phe Leu Tyr Asp Leu Asp Lys Gln Val Lys Ser  
115 120 125  
Ile Glu Arg Phe Leu Arg Arg Leu Glu Phe His Ala Ser Lys Ile Asp  
130 135 140  
Glu Leu Tyr Glu Ala Tyr Cys Val Gln Arg Arg Leu Arg Asp Gly Ala  
145 150 155 160  
Tyr Asn Met Val Arg Ala Tyr Thr Thr Gly Ser Pro Gly Ser Arg Glu  
165 170 175  
Ala Arg Asp Ser Leu Ala Glu Ala Thr Arg Gly His Arg Glu Tyr Thr  
180 185 190  
Glu Ser Met Cys Leu Leu Glu Ser Glu Leu Glu Ala Gln Leu Gly Glu  
195 200 205  
Phe His Leu Arg Met Lys Gly Leu Ala Gly Phe Ala Arg Leu Cys Val  
210 215 220

Gly Asp Gln Tyr Glu Ile Cys Met Lys Tyr Gly Arg Gln Arg Trp Lys  
225 230 235 240  
Leu Arg Gly Arg Ile Glu Gly Ser Gly Lys Gln Val Trp Asp Ser Glu  
245 250 255  
Glu Thr Ile Phe Leu Pro Leu Leu Thr Glu Phe Leu Ser Ile Lys Val  
260 265 270  
Thr Glu Leu Lys Gly Leu Ala Asn His Val Val Val Gly Ser Val Ser  
275 280 285  
Cys Glu Thr Lys Asp Leu Phe Ala Ala Leu Pro Gln Val Val Ala Val  
290 295 300  
Asp Ile Asn Asp Leu Gly Thr Ile Lys Leu Ser Leu Glu Val Thr Trp  
305 310 315 320  
Ser Pro Phe Asp Lys Asp Asp Gln Pro Ser Ala Ala Ser Ser Val Asn  
325 330 335  
Lys Ala Ser Thr Val Thr Lys Arg Phe Ser Thr Tyr Ser Gln Ser Pro  
340 345 350  
Pro Asp Thr Pro Ser Leu Arg Glu Gln Ala Phe Tyr Asn Met Leu Arg  
355 360 365  
Arg Gln Glu Glu Leu Glu Asn Gly Thr Ala Trp Ser Leu Ser Ser Glu  
370 375 380  
Ser Ser Asp Asp Ser Ser Ser Pro Gln Leu Ser Gly Thr Ala Arg His  
385 390 395 400  
Ser Pro Ala Pro Arg Pro Leu Val Gln Gln Pro Glu Pro Leu Pro Ile  
405 410 415  
Gln Val Ala Phe Arg Arg Pro Glu Thr Pro Ser Ser Gly Pro Leu Asp  
420 425 430  
Glu Glu Gly Ala Val Ala Pro Val Leu Ala Asn Gly His Ala Pro Tyr  
435 440 445  
Ser Arg Thr Leu Ser His Ile Ser Glu Ala Ser Val Asp Ala Ala Leu

450                                      455                                      460  
Ala Glu Ala Ser Val Glu Ala Val Gly Pro Glu Ser Leu Ala Trp Gly  
465                                      470                                      475                                      480  
Pro Ser Pro Pro Thr His Pro Ala Pro Thr His Gly Glu His Pro Ser  
                                    485                                      490                                      495  
Pro Val Pro Pro Ala Leu Asp Pro Gly His Ser Ala Thr Ser Ser Thr  
                                    500                                      505                                      510  
Leu Gly Thr Thr Gly Ser Val Pro Thr Ser Thr Asp Pro Ala Pro Ser  
                                    515                                      520                                      525  
Ala His Leu Asp Ser Val His Lys Ser Thr Asp Ser Gly Pro Ser Glu  
                                    530                                      535                                      540  
Leu Pro Gly Pro Thr His Thr Thr Thr Gly Ser Thr Tyr Ser Ala Ile  
545                                      550                                      555                                      560  
Thr Thr Thr His Ser Ala Pro Ser Pro Leu Thr His Thr Thr Thr Gly  
                                    565                                      570                                      575  
Ser Thr His Lys Pro Ile Ile Ser Thr Leu Thr Thr Thr Gly Pro Thr  
                                    580                                      585                                      590  
Leu Asn Ile Ile Gly Pro Val Gln Thr Thr Thr Ser Pro Thr His Thr  
                                    595                                      600                                      605  
Met Pro Ser Pro Thr His Thr Thr Ala Ser Pro Thr His Thr Ser Thr  
                                    610                                      615                                      620  
Ser Pro Thr His Thr Pro Thr Ser Pro Thr His Lys Thr Ser Met Ser  
625                                      630                                      635                                      640  
Pro Pro Thr Thr Thr Ser Pro Thr Pro Ser Gly Met Gly Leu Val Gln  
                                    645                                      650                                      655  
Thr Ala Thr Ser Pro Thr His Pro Thr Thr Ser Pro Thr His Pro Thr  
                                    660                                      665                                      670  
Thr Ser Pro Ile Leu Ile Asn Val Ser Pro Ser Thr Ser Leu Glu Leu  
                                    675                                      680                                      685

Ala Thr Leu Ser Ser Pro Ser Lys His Ser Asp Pro Thr Leu Pro Gly  
690 695 700  
Thr Asp Ser Leu Pro Cys Ser Pro Pro Val Ser Asn Ser Tyr Thr Gln  
705 710 715 720  
Ala Asp Pro Met Ala Pro Arg Thr Pro His Pro Ser Pro Ala His Ser  
725 730 735  
Ser Arg Lys Pro Leu Thr Ser Pro Ala Pro Asp Pro Ser Glu Ser Thr  
740 745 750  
Val Gln Ser Leu Ser Pro Thr Pro Ser Pro Pro Thr Pro Ala Pro Gln  
755 760 765  
His Ser Asp Leu Cys Leu Ala Met Ala Val Gln Thr Pro Val Pro Thr  
770 775 780  
Ala Ala Gly Gly Ser Gly Asp Arg Ser Leu Glu Glu Ala Leu Gly Ala  
785 790 795 800  
Leu Met Ala Ala Leu Asp Asp Tyr Arg Gly Gln Phe Pro Glu Leu Gln  
805 810 815  
Gly Leu Glu Gln Glu Val Thr Arg Leu Glu Ser Leu Leu Met Gln Arg  
820 825 830  
Gln Gly Leu Thr Arg Ser Arg Ala Ser Ser Leu Ser Ile Thr Val Glu  
835 840 845  
His Ala Leu Glu Ser Phe Ser Phe Leu Asn Glu Asp Glu Asp Glu Asp  
850 855 860  
Asn Asp Val Pro Gly Asp Arg Pro Pro Ser Ser Pro Glu Ala Gly Ala  
865 870 875 880  
Glu Asp Ser Ile Asp Ser Pro Ser Ala Arg Pro Leu Ser Thr Gly Cys  
885 890 895  
Pro Ala Leu Asp Ala Ala Leu Val Arg His Leu Tyr His Cys Ser Arg  
900 905 910  
Leu Leu Leu Lys Leu Gly Thr Phe Gly Pro Leu Arg Cys Gln Glu Ala

915 920 925  
Trp Ala Leu Glu Arg Leu Leu Arg Glu Ala Arg Val Leu Glu Ala Val  
930 935 940  
Cys Glu Phe Ser Arg Arg Trp Glu Ile Pro Ala Ser Ser Ala Gln Glu  
945 950 955 960  
Val Val Gln Phe Ser Ala Ser Arg Pro Gly Phe Leu Thr Phe Trp Asp  
965 970 975  
Gln Cys Thr Glu Arg Leu Ser Cys Phe Leu Cys Pro Val Glu Arg Val  
980 985 990  
Leu Leu Thr Phe Cys Asn Gln Tyr Gly Ala Arg Leu Ser Leu Arg Gln  
995 1000 1005  
Pro Gly Leu Ala Glu Ala Val Cys Val Lys Phe Leu Glu Asp Ala Leu  
1010 1015 1020  
Gly Gln Lys Leu Pro Arg Arg Pro Gln Pro Gly Pro Gly Glu Gln Leu  
1025 1030 1035 1040  
Thr Val Phe Gln Phe Trp Ser Phe Val Glu Thr Leu Asp Ser Pro Thr  
1045 1050 1055  
Met Glu Ala Tyr Val Thr Glu Thr Ala Glu Glu Val Leu Leu Val Arg  
1060 1065 1070  
Asn Leu Asn Ser Asp Asp Gln Ala Val Val Leu Lys Ala Leu Arg Leu  
1075 1080 1085  
Ala Pro Glu Gly Arg Leu Arg Arg Asp Gly Leu Arg Ala Leu Ser Ser  
1090 1095 1100  
Leu Leu Val His Gly Asn Asn Lys Val Met Ala Ala Val Ser Thr Gln  
1105 1110 1115 1120  
Leu Arg Ser Leu Ser Leu Gly Pro Thr Phe Arg Glu Arg Ala Leu Leu  
1125 1130 1135  
Cys Phe Leu Asp Gln Leu Glu Asp Glu Asp Val Gln Thr Arg Val Ala  
1140 1145 1150

Gly Cys Leu Ala Leu Gly Cys Ile Lys Ala Pro Glu Gly Ile Glu Pro

1155

1160

1165

Leu Val Tyr Leu Cys Gln Thr Asp Thr Glu Ala Val Arg Glu Ala Ala

1170

1175

1180

Arg Gln Ser Leu Gln Gln Cys Gly Glu Glu Gly Gln Ser Ala His Arg

1185

1190

1195

1200

Arg Leu Glu Glu Ser Leu Asp Ala Leu Pro Arg Ile Phe Gly Pro Gly

1205

1210

1215

Ser Met Ala Ser Thr Ala Phe

1220

<210> 3052

<211> 1044

<212> PRT

<213> Homo sapiens

<400> 3052

Met Gly Leu Leu Leu Pro Asp Tyr Arg Trp Phe Thr Thr Val Asp Ile

1

5

10

15

Leu Ala Asp Asn Cys Glu Lys Glu Pro Trp Ile Ile Leu Phe Tyr Phe

20

25

30

Cys Gly Thr Pro Gln Ser Gln Ile Gln Arg Thr His Gln Glu Lys Ile

35

40

45

Gln Ile Gln Leu Thr Gln Ser Phe Glu Lys Glu Glu Lys Pro Ser Lys

50

55

60

Asp Glu Ala Glu Lys Glu Lys Ala Ser Asp Lys Leu Pro Arg Lys Met

65

70

75

80

Leu Ser Arg Asp Ser Ser Gln Glu Tyr Thr Asp Ser Thr Gly Ile Asp



	85		90		95
Leu His Glu Phe Leu Val Asn Thr Leu Lys Asn Asn Pro Arg Asp Arg					
	100		105		110
Met Met Leu Leu Lys Leu Glu Gln Glu Ile Leu Asp Phe Ile Gly Asn					
	115		120		125
Asn Glu Ser Pro Arg Lys Lys Phe Pro Pro Met Thr Ser Tyr His Arg					
	130		135		140
Met Leu Leu His Arg Val Ala Ala Tyr Phe Gly Leu Asp His Asn Val					
145		150		155	160
Asp Gln Ser Gly Lys Ser Val Ile Val Asn Lys Thr Ser Asn Thr Arg					
	165		170		175
Ile Pro Asp Gln Lys Phe Asn Glu His Ile Lys Asp Asp Lys Gly Glu					
	180		185		190
Asp Phe Gln Lys Arg Tyr Ile Leu Lys Arg Asp Asn Ser Ser Phe Asp					
	195		200		205
Lys Asp Asp Asn Gln Met Arg Ile Arg Leu Lys Asp Asp Arg Arg Ser					
	210		215		220
Lys Ser Ile Glu Glu Arg Glu Glu Glu Tyr Gln Arg Ala Arg Asp Arg					
225		230		235	240
Ile Phe Ser Gln Asp Ser Leu Cys Ser Gln Glu Asn Tyr Ile Ile Asp					
	245		250		255
Lys Arg Leu Gln Asp Glu Asp Ala Ser Ser Thr Gln Gln Arg Arg Gln					
	260		265		270
Ile Phe Arg Val Asn Lys Asp Ala Ser Gly Arg Ser Thr Asn Ser His					
	275		280		285
Gln Ser Ser Thr Glu Asn Glu Leu Lys Tyr Ser Glu Pro Arg Pro Trp					
	290		295		300
Ser Ser Thr Asp Ser Asp Ser Ser Leu Arg Asn Leu Lys Pro Ala Val					
305		310		315	320

Thr Lys Ala Ser Ser Phe Ser Gly Ile Ser Val Leu Thr Arg Gly Asp  
325 330 335  
Ser Ser Gly Ser Ser Lys Ser Ile Gly Arg Leu Ser Lys Thr Gly Ser  
340 345 350  
Glu Ser Ser Gly Ser Val Gly Ser Ser Thr Gly Ser Leu Ser His Ile  
355 360 365  
Gln Gln Pro Leu Pro Gly Thr Ala Leu Ser Gln Ser Ser His Gly Ala  
370 375 380  
Pro Val Val Tyr Pro Thr Val Ser Thr His Ser Ser Leu Ser Phe Asp  
385 390 395 400  
Gly Gly Leu Asn Gly Gln Val Ala Ser Pro Ser Thr Ser Phe Phe Leu  
405 410 415  
Leu Pro Leu Glu Ala Ala Gly Ile Pro Pro Gly Ser Ile Leu Ile Asn  
420 425 430  
Pro Gln Thr Gly Gln Pro Phe Ile Asn Pro Asp Gly Ser Pro Val Val  
435 440 445  
Tyr Asn Pro Pro Met Thr Gln Gln Pro Val Arg Ser Gln Val Pro Gly  
450 455 460  
Pro Pro Gln Pro Pro Leu Pro Ala Pro Pro Gln Gln Pro Ala Ala Asn  
465 470 475 480  
His Ile Phe Ser Gln Gln Asp Asn Leu Gly Ser Gln Phe Ser His Met  
485 490 495  
Ser Leu Ala Arg Gln Pro Ser Ala Asp Gly Ser Asp Pro His Ala Ala  
500 505 510  
Met Phe Gln Ser Thr Val Val Leu Gln Ser Pro Gln Gln Ser Gly Tyr  
515 520 525  
Ile Met Thr Ala Ala Pro Pro Pro His Pro Pro Pro Pro Pro Pro  
530 535 540  
Pro Pro Pro Pro Pro Pro Leu Pro Pro Gly Gln Pro Val Pro Thr Ala

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Asn Pro Gln Ser Cys Ala His Ser Pro Pro Gln Trp Lys Gln Asn Lys  
 785                      790                      795                      800  
 Tyr Tyr Cys Asp His Gln Arg Gly Gln Lys Cys Val Glu Phe Ser Ser  
                             805                      810                      815  
 Val Asp Asn Ile Val Gln His Ser Pro Gln Leu Ser Ser Pro Ile Ile  
                             820                      825                      830  
 Ser Pro Ala Gln Ser Pro Ala Pro Ala Gln Leu Ser Thr Leu Lys Thr  
                             835                      840                      845  
 Val Arg Pro Ser Gly Pro Pro Leu Ser Ile Met Pro Gln Phe Ser Arg  
                             850                      855                      860  
 Pro Phe Val Pro Gly Gln Gly Asp Ser Arg Tyr Pro Leu Leu Gly Gln  
 865                      870                      875                      880  
 Pro Leu Gln Tyr Asn Pro Pro Ala Val Leu His Gly His Ile Pro Asn  
                             885                      890                      895  
 Gln Gln Gly Gln Pro Gly Ser Arg His Gly Asn Arg Gly Arg Arg Gln  
                             900                      905                      910  
 Ala Lys Lys Ala Ala Ser Thr Asp Leu Gly Ala Gly Glu Thr Val Val  
                             915                      920                      925  
 Gly Lys Val Leu Glu Ile Thr Glu Leu Pro Asp Gly Ile Thr Arg Met  
                             930                      935                      940  
 Glu Ala Glu Lys Leu Phe Gly Glu Leu Phe Lys Ile Gly Ala Lys Ile  
 945                      950                      955                      960  
 Arg Trp Leu Arg Asp Pro Gln Ser Gln Pro Arg Arg His Pro Leu Cys  
                             965                      970                      975  
 Cys Gly Ser Gly Asp Asn Thr Ala Asn Pro Glu Arg Ser Lys Pro Ser  
                             980                      985                      990  
 Asp Leu Ala Ser Thr Tyr Thr Val Leu Ala Thr Phe Pro Ser Ile Ser  
                             995                      1000                      1005  
 Ala Ala Gln Asn Ala Leu Lys Lys Gln Ile Asn Ser Val Asn Lys Phe

1010	1015	1020
Lys Leu Arg Thr Ser Lys Lys His Tyr Asp Phe His Ile Leu Glu Arg		
1025	1030	1035
Ala Ser Ser Gln		1040

&lt;210&gt; 3053

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3053

Met Lys Leu Val Leu Phe Cys Phe Val Leu Phe Cys Val Leu Arg Gln
1 5 10 15
Gly Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Gly Met Ile Thr Ala
20 25 30
His His Ser Leu Asp Leu Leu Gly Ser Gly Asp Thr Pro Thr Ser Ala
35 40 45
Ser Gln Val Ala Gly Thr Ala Val Thr Cys Tyr His Thr Gln Leu Ile
50 55 60
Phe Val Phe Phe Val Glu Thr Gly Phe Thr Thr Leu Pro Gly Leu Val
65 70 75 80
Ala Asp Ser Trp Ala Gln Thr Ile Cys Leu Ala Trp Pro Pro Arg Val
85 90 95
Leu Gly Leu Gln Ala
100

&lt;210&gt; 3054

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3054

Met Pro Ser Gly Val Phe Pro Tyr Ala Thr Ala Gln Ser His Ser Leu

1 5 10 15

Gly Gln Pro His Ile Glu Val Ser Phe Ser Leu Gln Thr His Thr Ser

20 25 30

Leu Ser His His Leu Gly Met Glu Ile Pro Thr Arg Val Lys Val Lys

35 40 45

Gly Pro Pro Gln Ala Ser His Ser Leu Leu Ser Phe Leu Pro Asp Gln

50 55 60

Val Cys Gln Pro Met Ala Ser Tyr Ala Pro His Pro His Cys Phe Cys

65 70 75 80

Leu His Val Asn Glu Thr Lys Gly Leu Ser Ile Ser Trp Glu Asp Trp

85 90 95

Gly Leu Leu Pro Asn Gly Pro Leu Cys Pro Ile Ile Gly Ala Arg His

100 105 110

Pro Ile His Thr Phe Ala Pro Leu Leu Gln Asp Ser Ile Phe Leu Phe

115 120 125

Thr Gln Ser Leu Tyr Ser Arg Ile Gln Ser Trp Ile Val Val Tyr Leu

130 135 140

Pro Gly Lys Leu Ile Ile Phe Val

145 150

&lt;210&gt; 3055

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3055

Met Pro Gly Cys Asn His Ser Met Thr Gln Leu His Met Leu Ser Gly

1 5 10 15

Leu Arg Ile Tyr His Asn Lys Ser Ala Pro Val Ile Glu Val Tyr Cys

20 25 30

Pro Gln Lys Pro Ile Cys Lys Gln Asn Trp Thr Trp Leu Glu Ile Met

35 40 45

Asn Val Phe Val Trp Glu Asp Cys Ile Ala Lys Gln Ala Glu Val Leu

50 55 60

Cys Asn Asn Ser Cys Gly Ile Ile Ile Asp Trp Ser Pro Lys Gly Met

65 70 75 80

Phe Ser Leu Asn Cys Thr Cys Gln Ser Val Cys His Ser His Thr Met

85 90 95

Phe Ser Trp Ser Glu Gln Asn Gly Gln Met Val Glu Met Val Arg Ser

100 105 110

Met Ala Arg Val Pro Ile Ile

115

&lt;210&gt; 3056

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3056

Met Ala Ser Ala Leu Ser Tyr Val Ser Lys Phe Lys Ser Phe Val Ile  
 1 5 10 15  
 Leu Phe Val Thr Pro Leu Leu Leu Leu Pro Leu Val Ile Leu Met Pro  
 20 25 30  
 Ala Lys Phe Val Arg Cys Ala Tyr Val Ile Ile Leu Met Ala Ile Tyr  
 35 40 45  
 Trp Cys Thr Glu Val Ile Pro Leu Ala Val Thr Ser Leu Met Pro Val  
 50 55 60  
 Leu Leu Phe Pro Leu Phe Gln Ile Leu Asp Ser Arg Gln Val Cys Val  
 65 70 75 80  
 Gln Tyr Met Lys Asp Thr Asn Met Leu Phe Leu Gly Gly Leu Ile Val  
 85 90 95  
 Ala Val Ala Val Glu Arg Trp Asn Leu His Lys Arg Ile Ala Leu Arg  
 100 105 110  
 Thr Leu Leu Trp Val Gly Ala Lys Pro Ala Arg Asn Thr Ala Thr Thr  
 115 120 125  
 Ala Met Met Val Pro Ile Val Glu Ala Ile Leu Gln Gln Met Glu Ala  
 130 135 140  
 Thr Ser Ala Ala Thr Glu Ala Gly Leu Glu Leu Val Asp Lys Gly Lys  
 145 150 155 160  
 Ala Lys Glu Leu Pro Gly Ser Gln Val Ile Phe Glu Gly Pro Thr Leu  
 165 170 175  
 Gly Gln Gln Glu Asp Gln Glu Arg Lys Arg Leu Cys Lys Ala Met Thr  
 180 185 190  
 Leu Cys Ile Cys Tyr Ala Ala Ser Ile Gly Gly Thr Ala Thr Leu Thr  
 195 200 205  
 Gly Thr Gly Pro Asn Val Val Leu Leu Gly Gln Met Asn Glu Leu Phe  
 210 215 220  
 Pro Asp Ser Lys Asp Leu Val Asn Phe Ala Ser Trp Phe Ala Phe Ala



225                      230                      235                      240  
Phe Pro Asn Met Leu Val Met Leu Leu Phe Ala Trp Leu Trp Leu Gln  
                         245                      250                      255  
Phe Val Tyr Met Arg Phe Asn Phe Lys Lys Ser Trp Gly Cys Gly Leu  
                         260                      265                      270  
Glu Ser Lys Lys Asn Glu Lys Ala Ala Leu Lys Val Leu Gln Glu Glu  
                         275                      280                      285  
Tyr Arg Lys Leu Gly Pro Leu Ser Phe Ala Glu Ile Asn Val Leu Ile  
                         290                      295                      300  
Cys Phe Phe Leu Leu Val Ile Leu Trp Phe Ser Arg Asp Pro Gly Phe  
305                      310                      315                      320  
Met Pro Gly Trp Leu Thr Val Ala Trp Val Glu Gly Glu Thr Lys Tyr  
                         325                      330                      335  
Val Ser Asp Ala Thr Val Ala Ile Phe Val Ala Thr Leu Leu Phe Ile  
                         340                      345                      350  
Val Pro Ser Gln Lys Pro Lys Phe Asn Phe Arg Ser Gln Thr Glu Glu  
                         355                      360                      365  
Glu Arg Lys Thr Pro Phe Tyr Pro Pro Pro Leu Leu Asp Trp Lys Val  
                         370                      375                      380  
Thr Gln Glu Lys Val Pro Trp Gly Ile Val Leu Leu Leu Gly Gly Gly  
385                      390                      395                      400  
Phe Ala Leu Ala Lys Gly Ser Glu Ala Ser Gly Leu Ser Val Trp Met  
                         405                      410                      415  
Gly Lys Gln Met Glu Pro Leu His Ala Val Pro Pro Ala Ala Ile Thr  
                         420                      425                      430  
Leu Ile Leu Ser Leu Leu Val Ala Val Phe Thr Glu Cys Thr Ser Asn  
                         435                      440                      445  
Val Ala Thr Thr Thr Leu Phe Leu Pro Ile Phe Ala Ser Met Ser Arg  
                         450                      455                      460

出証特 2 0 0 4 - 3 0 5 9 6 6 1

65                      70                      75                      80  
Thr Asn Ser Ser Gly Phe Asn Ser Ser Gln Gln Asp Tyr Pro Ser Tyr  
                         85                      90                      95  
Pro Ser Phe Gly Gln Gly Gln Tyr Ala Gln Tyr Tyr Asn Ser Ser Pro  
                         100                      105                      110  
Tyr Pro Ala His Tyr Met Thr Ser Ser Asn Thr Ser Pro Thr Thr Pro  
                         115                      120                      125  
Ser Thr Asn Ala Thr Tyr Gln Leu Gln Glu Pro Pro Ser Gly Ile Thr  
                         130                      135                      140  
Ser Gln Ala Val Thr Asp Pro Thr Ala Glu Tyr Ser Thr Ile His Ser  
145                      150                      155                      160  
Pro Ser Thr Pro Ile Lys Asp Ser Asp Ser Asp Arg Leu Arg Arg Gly  
                         165                      170                      175  
Ser Asp Gly Lys Ser Arg Gly Arg Gly Arg Arg Ser Asn Asn Pro Ser  
                         180                      185                      190  
Pro Pro Pro Asp Ser Asp Leu Glu Arg Val Phe Ile Trp Asp Leu Asp  
                         195                      200                      205  
Glu Thr Ile Ile Val Phe His Ser Leu Leu Thr Gly Ser Tyr Ala Asn  
                         210                      215                      220  
Arg Tyr Gly Arg Asp Pro Pro Thr Ser Val Ser Leu Gly Leu Arg Met  
225                      230                      235                      240  
Glu Glu Met Ile Phe Asn Leu Ala Asp Thr His Leu Phe Phe Asn Asp  
                         245                      250                      255  
Leu Glu Glu Cys Asp Gln Val His Ile Asp Asp Val Ser Ser Asp Asp  
                         260                      265                      270  
Asn Gly Gln Asp Leu Ser Thr Tyr Asn Phe Gly Thr Asp Gly Phe Pro  
                         275                      280                      285  
Ala Ala Ala Thr Ser Ala Asn Leu Cys Leu Ala Thr Gly Val Arg Gly  
                         290                      295                      300

Gly Val Asp Trp Met Arg Lys Leu Ala Phe Arg Tyr Arg Arg Val Lys  
305 310 315 320  
Glu Ile Tyr Asn Thr Tyr Lys Asn Asn Val Gly Gly Leu Leu Gly Pro  
325 330 335  
Ala Lys Arg Glu Ala Trp Leu Gln Leu Arg Ala Glu Ile Glu Ala Leu  
340 345 350  
Thr Asp Ser Trp Leu Thr Leu Ala Leu Lys Ala Leu Ser Leu Ile His  
355 360 365  
Ser Arg Thr Asn Cys Val Asn Ile Leu Val Thr Thr Thr Gln Leu Ile  
370 375 380  
Pro Ala Leu Ala Lys Val Leu Leu Tyr Gly Leu Gly Ile Val Phe Pro  
385 390 395 400  
Ile Glu Asn Ile Tyr Ser Ala Thr Lys Ile Gly Lys Glu Ser Cys Phe  
405 410 415  
Glu Arg Ile Ile Gln Arg Phe Gly Arg Lys Val Val Tyr Val Val Ile  
420 425 430  
Gly Asp Gly Val Glu Glu Glu Gln Gly Ala Lys Lys His Ala Met Pro  
435 440 445  
Phe Trp Arg Ile Ser Ser His Ser Asp Leu Met Ala Leu His His Ala  
450 455 460  
Leu Glu Leu Glu Tyr Leu  
465 470

&lt;210&gt; 3058

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3058

Met Cys Ile Gly Gly Gly Phe Leu Thr Glu Phe Pro Glu Gln Lys Leu  
 1 5 10 15  
 Phe Ala Ala Leu Leu Ile Lys Cys Val Val Gln Leu Glu Leu Ile Gln  
 20 25 30  
 Thr Ile Asp Asn Ile Val Phe Phe Pro Ala Thr Ser Lys Lys Glu Asp  
 35 40 45  
 Ala Glu Asn Leu Ala Ala Ala Gln Arg Asp Ala Val Asp Phe Asp Val  
 50 55 60  
 Arg Val Asp Thr Gln Asp Gln Gly Met Tyr Arg Phe Leu Thr Ser Gln  
 65 70 75 80  
 Gln Leu Phe Lys Leu Leu Asp Cys Leu Leu Glu Ser His Arg Phe Pro  
 85 90 95  
 Lys Ala Phe Asn Ser Asn Asn Glu Gln Arg Thr Ala Leu Trp Lys Ala  
 100 105 110  
 Gly Phe Lys Gly Lys Ser Lys Pro Asn Leu Leu Lys Gln Glu Thr Ser  
 115 120 125  
 Ser Leu Ala Cys Gly Leu Arg Ile Leu Phe Arg Met Tyr Met Asp Glu  
 130 135 140  
 Ser Arg Val Ser Ala Trp Glu Glu Val Gln Gln Arg Leu Leu Asn Val  
 145 150 155 160  
 Cys Ser Glu Ala Leu Ser Tyr Phe Leu Thr Leu Thr Ser Glu Ser His  
 165 170 175  
 Arg Glu Ala Trp Thr Asn Leu Leu Leu Leu Phe Leu Thr Lys Val Leu  
 180 185 190  
 Lys Ile Ser Asp Asn Arg Phe Lys Ala His Ala Ser Phe Tyr Tyr Pro  
 195 200 205  
 Leu Leu Cys Glu Ile Met Gln Phe Asp Leu Ile Pro Glu Leu Arg Ala  
 210 215 220

Val Leu Arg Arg Phe Phe Leu Arg Ile Gly Val Val Phe Gln Ile Ser  
 225                      230                      235                      240  
 Gln Pro Pro Glu Gln Glu Leu Gly Ile Asn Lys Gln  
                          245                      250

<210> 3059

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3059

Met Val Tyr Ile Leu Glu Thr Glu Asp Pro Pro Ala Asp Leu Gly Leu  
       1                      5                      10                      15  
 Glu Asn Leu Thr Ile Pro Ala Ser Val Leu Ser Asp Pro Lys Glu Asp  
                          20                      25                      30  
 Glu Ala Lys Lys Pro Leu His Pro Cys Pro His Leu Leu Leu Thr Ile  
                          35                      40                      45  
 Ala Gly Asp Leu His Ser Ser Phe Cys Leu Glu Arg Val Gly Ser Asp  
                          50                      55                      60  
 Pro Gly Gly Ile Arg Phe Glu Ala Leu Met Arg Phe Leu Gln Ile Phe  
       65                      70                      75                      80  
 Ile Trp Ala Val Gly Ser Val Phe Gln Asn Val Arg Asp Ser Phe Arg  
                          85                      90                      95  
 Gln Leu Val Arg Val Ile Pro Phe Ser Leu Leu Lys Val Ala Gly Arg  
                          100                      105                      110  
 Glu Trp Glu Arg Pro Phe Tyr Ala Ile Leu Asp Ser Gly Ser Glu Pro  
                          115                      120                      125  
 Thr

<210> 3060

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3060

Met	Leu	Pro	Val	Ala	Pro	Arg	His	Ala	Gly	Gly	Ile	Cys	Leu	Leu	Pro
1				5					10					15	
His	Thr	Ser	Ala	Pro	Leu	His	Val	Val	Ala	Pro	Arg	Ser	Thr	Ala	Trp
			20					25					30		
Gly	Leu	Arg	Gly	Ser	Thr	Ser	Arg	Cys	Pro	His	Thr	Val	Met	Leu	Gly
		35					40					45			
Val	Ala	Glu	Ala	Gly	Gln	Phe	Gly	Phe	Gly	Ser	Ser	Ser	Ser	Ala	Arg
	50					55					60				
Trp	Phe	Ser	Trp	Gly	Trp	Gly	Ala	Leu	Ala	Ala	Val	Arg	Gln	Phe	Trp
	65				70					75				80	
Ser	Gln	Pro	Ser	Pro	Gly	Asn	Arg	Pro	Arg	Ile	Ile	Ser	Met	Lys	Asn
				85					90					95	
Asn	Met	Pro	Val	Val	Ile	Lys	Pro	Leu	Lys	Pro	Gln	Ala	Ser		
			100					105					110		

<210> 3061

<211> 117

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3061

Met Ala Glu Gly Tyr Gly Ala Cys Leu Ile Asn Lys Pro Glu Leu Val  
 1 5 10 15  
 Gln Asp Met Val Lys Gln Val Arg Asn Gln Val Glu Thr Pro Gly Phe  
 20 25 30  
 Ser Val Ser Ile Lys Ile Arg Ile His Asp Asp Leu Lys Arg Thr Val  
 35 40 45  
 Asp Leu Cys Gln Lys Ala Glu Ala Thr Gly Val Ser Trp Ile Thr Val  
 50 55 60  
 His Gly Arg Thr Ala Glu Glu Arg His Gln Pro Val His Tyr Asp Ser  
 65 70 75 80  
 Ile Lys Ile Ile Lys Glu Asn Met Ser Ile Pro Val Ile Ala Asn Gly  
 85 90 95  
 Asp Ile Arg Ser Leu Lys Glu Ala Glu Asn Val Trp Arg Ile Thr Gly  
 100 105 110  
 Thr Asp Gly Lys Lys  
 115

&lt;210&gt; 3062

&lt;211&gt; 1063

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3062

Met Glu Val Leu Gln Cys Asp Gly Cys Asp Phe Arg Ala Pro Ser Tyr  
 1 5 10 15  
 Glu Asp Leu Lys Ala His Ile Gln Asp Val His Thr Ala Phe Leu Gln



20	25	30
Pro Thr Asp Val Ala Glu Asp Asn Val Asn Glu Leu Arg Cys Gly Ser		
35	40	45
Val Asn Ala Ser Asn Gln Thr Glu Val Glu Phe Ser Ser Ile Lys Asp		
50	55	60
Glu Phe Ala Ile Ala Glu Asp Leu Ser Gly Gln Asn Ala Thr Ser Leu		
65	70	75
Gly Thr Gly Gly Tyr Tyr Gly His Ser Pro Gly Tyr Tyr Gly Gln His		
85	90	95
Ile Ala Ala Asn Pro Lys Pro Thr Asn Lys Phe Phe Gln Cys Lys Phe		
100	105	110
Cys Val Arg Tyr Phe Arg Ser Lys Asn Leu Leu Ile Glu His Thr Arg		
115	120	125
Lys Val His Gly Ala Gln Ala Glu Gly Ser Ser Ser Gly Pro Pro Val		
130	135	140
Pro Gly Ser Leu Asn Tyr Asn Ile Met Met His Glu Gly Phe Gly Lys		
145	150	155
Val Phe Ser Cys Gln Phe Cys Thr Tyr Lys Ser Pro Arg Arg Ala Arg		
165	170	175
Ile Ile Lys His Arg Lys Met Tyr His Lys Asn Asn Leu Lys Glu Thr		
180	185	190
Thr Ala Ser Pro Pro Ala Pro Ala Pro Met Pro Asp Pro Val Val Pro		
195	200	205
Pro Val Ser Leu Gln Asp Pro Cys Lys Glu Leu Pro Ala Glu Val Val		
210	215	220
Glu Arg Ser Ile Leu Glu Ser Met Val Lys Pro Leu Thr Lys Ser Arg		
225	230	235
Gly Asn Phe Cys Cys Glu Trp Cys Ser Tyr Gln Thr Pro Arg Arg Glu		
245	250	255

Arg Trp Cys Asp His Met Met Lys Lys His Arg Ser Met Val Lys Ile  
260 265 270  
Leu Ser Ser Leu Arg Gln Gln Gln Glu Gly Thr Asn Leu Pro Asp Val  
275 280 285  
Pro Asn Lys Ser Ala Pro Ser Pro Thr Ser Asn Ser Thr Tyr Leu Thr  
290 295 300  
Met Asn Ala Ala Ser Arg Glu Ile Pro Asn Thr Thr Val Ser Asn Phe  
305 310 315 320  
Arg Gly Ser Met Gly Asn Ser Ile Met Arg Pro Asn Ser Ser Ala Ser  
325 330 335  
Lys Phe Ser Pro Met Ser Tyr Pro Gln Met Lys Pro Lys Ser Pro His  
340 345 350  
Asn Ser Gly Leu Val Asn Leu Thr Glu Arg Ser Arg Tyr Gly Met Thr  
355 360 365  
Asp Met Thr Asn Ser Ser Ala Asp Leu Glu Thr Asn Ser Met Leu Asn  
370 375 380  
Asp Ser Ser Ser Asp Glu Glu Leu Asn Glu Ile Asp Ser Glu Asn Gly  
385 390 395 400  
Leu Ser Ala Met Asp His Gln Thr Ser Gly Leu Ser Ala Glu Gln Leu  
405 410 415  
Met Gly Ser Asp Gly Asn Lys Leu Leu Glu Thr Lys Gly Ile Pro Phe  
420 425 430  
Arg Arg Phe Met Asn Arg Phe Gln Cys Pro Phe Cys Pro Phe Leu Thr  
435 440 445  
Met His Arg Arg Ser Ile Ser Arg His Ile Glu Asn Ile His Leu Ser  
450 455 460  
Gly Lys Thr Ala Val Tyr Lys Cys Asp Glu Cys Pro Phe Thr Cys Lys  
465 470 475 480  
Ser Ser Leu Lys Leu Gly Ala His Lys Gln Cys His Thr Gly Thr Thr

	485		490		495
Ser Asp Trp Asp Ala Val Asn Ser Gln Ser Glu Ser Ile Ser Ser Ser					
	500		505		510
Leu Asn Glu Gly Val Val Ser Tyr Glu Ser Ser Ser Ile Asn Gly Arg					
	515		520		525
Lys Ser Gly Val Met Leu Asp Pro Leu Gln Gln Gln Gln Pro Pro Gln					
	530		535		540
Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Ser Gln Pro Gln Pro Leu					
545		550		555	560
Gln Gln Pro Gln Pro Pro Gln Leu Gln Pro Pro His Gln Val Pro Pro					
	565		570		575
Gln Pro Gln Thr Gln Pro Pro Pro Thr Gln Gln Pro Gln Pro Pro Thr					
	580		585		590
Gln Ala Ala Pro Leu His Pro Tyr Lys Cys Thr Met Cys Asn Tyr Ser					
	595		600		605
Thr Thr Thr Leu Lys Gly Leu Arg Val His Gln Gln His Lys His Ser					
	610		615		620
Phe Cys Asp Asn Leu Pro Lys Phe Glu Gly Gln Pro Ser Ser Leu Pro					
625		630		635	640
Leu Glu Asn Glu Thr Asp Ser His Pro Ser Ser Ser Asn Thr Val Lys					
	645		650		655
Lys Ser Gln Thr Ser Ile Leu Gly Leu Ser Ser Lys Asn Asn Phe Val					
	660		665		670
Ala Lys Ala Ser Arg Lys Leu Ala Asn Asp Phe Pro Leu Asp Leu Ser					
	675		680		685
Pro Val Lys Lys Arg Thr Arg Ile Asp Glu Ile Ala Ser Asn Leu Gln					
	690		695		700
Ser Lys Ile Asn Gln Thr Lys Gln Gln Glu Asp Ala Val Ile Asn Val					
705		710		715	720

Glu Asp Asp Glu Glu Glu Glu Glu Asp Asn Glu Val Glu Ile Glu Val  
725 730 735  
Glu Leu Asp Arg Glu Glu Glu Pro Thr Glu Pro Ile Ile Glu Val Pro  
740 745 750  
Thr Ser Phe Ser Ala Gln Gln Ile Trp Val Arg Asp Thr Ser Glu Pro  
755 760 765  
Gln Lys Glu Pro Asn Phe Arg Asn Ile Thr His Asp Tyr Asn Ala Thr  
770 775 780  
Asn Gly Ala Glu Ile Glu Leu Thr Leu Ser Glu Asp Glu Glu Asp Tyr  
785 790 795 800  
Tyr Gly Ser Ser Thr Asn Leu Lys Asp His Gln Val Ser Asn Thr Ala  
805 810 815  
Leu Leu Asn Thr Gln Thr Pro Ile Tyr Gly Thr Glu His Asn Ser Glu  
820 825 830  
Asn Thr Asp Phe Gly Asp Ser Gly Arg Leu Tyr Tyr Cys Lys His Cys  
835 840 845  
Asp Phe Asn Asn Lys Ser Ala Arg Ser Val Ser Thr His Tyr Gln Arg  
850 855 860  
Met His Pro Tyr Ile Lys Phe Ser Phe Arg Tyr Ile Leu Asp Pro Asn  
865 870 875 880  
Asp His Ser Ala Val Tyr Arg Cys Leu Glu Cys Tyr Ile Asp Tyr Thr  
885 890 895  
Asn Phe Glu Asp Leu Gln Gln His Tyr Gly Glu His His Pro Glu Ala  
900 905 910  
Met Asn Val Leu Asn Phe Asp His Ser Asp Leu Ile Tyr Arg Cys Arg  
915 920 925  
Phe Cys Ser Tyr Thr Ser Pro Asn Val Arg Ser Leu Met Pro His Tyr  
930 935 940  
Gln Arg Met His Pro Thr Val Lys Ile Asn Asn Ala Met Ile Phe Ser

945                      950                      955                      960  
 Ser Tyr Val Val Glu Gln Gln Glu Gly Leu Asn Thr Glu Ser Gln Thr  
                          965                      970                      975  
 Leu Arg Glu Ile Leu Asn Ser Ala Pro Lys Asn Met Ala Thr Ser Thr  
                          980                      985                      990  
 Pro Val Ala Arg Gly Gly Gly Leu Pro Ala Thr Phe Asn Lys Asn Thr  
                          995                      1000                      1005  
 Pro Lys Thr Phe Thr Pro Glu Cys Glu Asn Gln Lys Asp Pro Leu Val  
                          1010                      1015                      1020  
 Asn Thr Val Val Val Tyr Asp Cys Asp Val Cys Ser Phe Ala Ser Pro  
 1025                      1030                      1035                      1040  
 Asn Met His Ser Val Leu Val His Tyr Gln Lys Lys His Pro Glu Glu  
                          1045                      1050                      1055  
 Lys Ala Ser Tyr Phe Arg Ile  
                          1060

<210> 3063

<211> 838

<212> PRT

<213> Homo sapiens

<400> 3063

Met Pro Met Asp Leu Ile Leu Val Val Trp Phe Cys Val Cys Thr Ala  
   1                      5                      10                      15  
 Arg Thr Ala Glu Asp Met Lys Pro Pro Val Leu Ser Leu Ile Trp Arg  
                          20                      25                      30  
 Thr Arg Val Leu Lys Ser Leu Leu Gln Gln Ser Leu Gln Gly Val Val  
                          35                      40                      45

Gly Phe Gly Met Asp Pro Asp Leu Gln Met Asp Ile Val Thr Glu Leu  
 50 55 60  
 Asp Leu Val Asn Thr Thr Leu Gly Val Ala Gln Val Ser Gly Met His  
 65 70 75 80  
 Asn Ala Ser Lys Ala Phe Leu Phe Gln Asp Ile Glu Arg Glu Ile His  
 85 90 95  
 Ala Ala Pro His Val Ser Glu Lys Leu Ile Gln Leu Phe Gln Asn Lys  
 100 105 110  
 Ser Glu Phe Thr Ile Leu Ala Thr Val Gln Gln Lys Pro Ser Thr Ser  
 115 120 125  
 Gly Val Ile Leu Ser Ile Arg Glu Leu Glu His Ser Tyr Phe Glu Pro  
 130 135 140  
 Glu Ser Ser Gly Leu Arg Asp Glu Ile Arg Tyr His Tyr Ile His Asn  
 145 150 155 160  
 Gly Lys Pro Arg Thr Glu Ala Leu Pro Tyr Arg Met Ala Asp Gly Gln  
 165 170 175  
 Trp His Lys Val Ala Leu Ser Val Ser Ala Ser His Leu Leu Leu His  
 180 185 190  
 Val Asp Cys Asn Arg Ile Tyr Glu Arg Val Ile Asp Pro Pro Asp Thr  
 195 200 205  
 Asn Leu Pro Pro Gly Ile Asn Leu Trp Leu Gly Gln Arg Asn Gln Lys  
 210 215 220  
 His Gly Leu Phe Lys Gly Ile Ile Gln Asp Gly Lys Ile Ile Phe Met  
 225 230 235 240  
 Pro Asn Gly Tyr Ile Thr Gln Cys Pro Asn Leu Asn His Thr Cys Pro  
 245 250 255  
 Thr Cys Ser Asp Phe Leu Ser Leu Val Gln Gly Ile Met Asp Leu Gln  
 260 265 270  
 Glu Leu Leu Ala Lys Met Thr Ala Lys Leu Asn Tyr Ala Glu Thr Arg

275	280	285
Leu Ser Gln Leu Glu Asn Cys His Cys Glu Lys Thr Cys Gln Val Ser		
290	295	300
Gly Leu Leu Tyr Arg Asp Gln Asp Ser Trp Val Asp Gly Asp His Cys		
305	310	315
Arg Asn Cys Thr Cys Lys Ser Gly Ala Val Glu Cys Arg Arg Met Ser		
325	330	335
Cys Pro Pro Leu Asn Cys Ser Pro Asp Ser Leu Pro Val His Ile Ala		
340	345	350
Gly Gln Cys Cys Lys Val Cys Arg Pro Lys Cys Ile Tyr Gly Gly Lys		
355	360	365
Val Leu Ala Glu Gly Gln Arg Ile Leu Thr Lys Ser Cys Arg Glu Cys		
370	375	380
Arg Gly Gly Val Leu Val Lys Ile Thr Glu Met Cys Pro Pro Leu Asn		
385	390	395
Cys Ser Glu Lys Asp His Ile Leu Pro Glu Asn Gln Cys Cys Arg Val		
405	410	415
Cys Arg Gly His Asn Phe Cys Ala Glu Gly Pro Lys Cys Gly Glu Asn		
420	425	430
Ser Glu Cys Lys Asn Trp Asn Thr Lys Ala Thr Cys Glu Cys Lys Ser		
435	440	445
Gly Tyr Ile Ser Val Gln Gly Asp Ser Ala Tyr Cys Glu Asp Ile Asp		
450	455	460
Glu Cys Ala Ala Lys Met His Tyr Cys His Ala Asn Thr Val Cys Val		
465	470	475
Asn Leu Pro Gly Leu Tyr Arg Cys Asp Cys Val Pro Gly Tyr Ile Arg		
485	490	495
Val Asp Asp Phe Ser Cys Thr Glu His Asp Glu Cys Gly Ser Gly Gln		
500	505	510

His Asn Cys Asp Glu Asn Ala Ile Cys Thr Asn Thr Val Gln Gly His  
515 520 525

Ser Cys Thr Cys Lys Pro Gly Tyr Val Gly Asn Gly Thr Ile Cys Arg  
530 535 540

Ala Phe Cys Glu Glu Gly Cys Arg Tyr Gly Gly Thr Cys Val Ala Pro  
545 550 555 560

Asn Lys Cys Val Cys Pro Ser Gly Phe Thr Gly Ser His Cys Glu Lys  
565 570 575

Asp Ile Asp Glu Cys Ser Glu Gly Ile Ile Glu Cys His Asn His Ser  
580 585 590

Arg Cys Val Asn Leu Pro Gly Trp Tyr His Cys Glu Cys Arg Ser Gly  
595 600 605

Phe His Asp Asp Gly Thr Tyr Ser Leu Ser Gly Glu Ser Cys Ile Asp  
610 615 620

Ile Asp Glu Cys Ala Leu Arg Thr His Thr Cys Trp Asn Asp Ser Ala  
625 630 635 640

Cys Ile Asn Leu Ala Gly Gly Phe Asp Cys Leu Cys Pro Ser Gly Pro  
645 650 655

Ser Cys Ser Gly Asp Cys Pro His Glu Gly Gly Leu Lys His Asn Gly  
660 665 670

Gln Val Trp Thr Leu Lys Glu Asp Arg Cys Ser Val Cys Ser Cys Lys  
675 680 685

Asp Gly Lys Ile Phe Cys Arg Arg Thr Ala Cys Asp Cys Gln Asn Pro  
690 695 700

Ser Ala Asp Leu Phe Cys Cys Pro Glu Cys Asp Thr Arg Val Thr Ser  
705 710 715 720

Gln Cys Leu Asp Gln Asn Gly His Lys Leu Tyr Arg Ser Gly Asp Asn  
725 730 735

Trp Thr His Ser Cys Gln Gln Cys Arg Cys Leu Glu Gly Glu Val Asp



740                      745                      750  
 Cys Trp Pro Leu Thr Cys Pro Asn Leu Ser Cys Glu Tyr Thr Ala Ile  
 755                      760                      765  
 Leu Glu Gly Glu Cys Cys Pro Arg Cys Val Ser Asp Pro Cys Leu Ala  
 770                      775                      780  
 Asp Asn Ile Thr Tyr Asp Ile Arg Lys Thr Cys Leu Asp Ser Tyr Gly  
 785                      790                      795                      800  
 Val Ser Arg Leu Ser Gly Ser Val Trp Thr Met Ala Gly Ser Pro Cys  
 805                      810                      815  
 Thr Thr Cys Lys Cys Lys Asn Gly Arg Val Cys Cys Ser Val Asp Phe  
 820                      825                      830  
 Glu Cys Leu Gln Asn Asn  
 835

<210> 3064

<211> 935

<212> PRT

<213> Homo sapiens

<400> 3064

Met Ser His Tyr His Phe Ile Lys Cys Cys Cys Phe Gln Leu Cys Asn  
 1                      5                      10                      15  
 Val Phe Arg Ser His Glu Met Glu Ile Asp Gln Cys Leu Leu Glu Ser  
 20                      25                      30  
 Leu Pro Leu Gly Gln Arg Gln Arg Leu Val Lys Arg Met Arg Cys Glu  
 35                      40                      45  
 Gln Ile Lys Ala Tyr Tyr Glu Arg Glu Lys Ala Phe Gln Lys Gln Glu  
 50                      55                      60

Gly Phe Leu Lys Arg Leu Lys His Ala Lys Asn Pro Lys Val His Phe  
65 70 75 80  
Asn Leu Thr Asp Met Leu Gln Asp Ala Ile Ile His His Asn Asp Lys  
85 90 95  
Glu Val Leu Arg Leu Leu Lys Glu Gly Ala Asp Pro His Thr Leu Val  
100 105 110  
Ser Ser Gly Gly Ser Leu Leu His Leu Cys Ala Arg Tyr Asp Asn Ala  
115 120 125  
Phe Ile Ala Glu Ile Leu Ile Asp Arg Gly Val Asn Val Asn His Gln  
130 135 140  
Asp Glu Asp Phe Trp Thr Pro Met His Ile Ala Cys Ala Cys Asp Asn  
145 150 155 160  
Pro Asp Ile Val Leu Leu Leu Val Leu Ala Gly Ala Asn Val Leu Leu  
165 170 175  
Gln Asp Val Asn Gly Asn Ile Pro Leu Asp Tyr Ala Val Glu Gly Thr  
180 185 190  
Glu Ser Ser Ser Ile Leu Leu Thr Tyr Leu Asp Glu Asn Gly Val Asp  
195 200 205  
Leu Thr Ser Leu Arg Gln Met Lys Leu Gln Arg Pro Met Ser Met Leu  
210 215 220  
Thr Asp Val Lys His Phe Leu Ser Ser Gly Gly Asn Val Asn Glu Lys  
225 230 235 240  
Asn Asp Glu Gly Val Thr Leu Leu His Met Ala Cys Ala Ser Gly Tyr  
245 250 255  
Lys Glu Val Val Ser Leu Ile Leu Glu His Gly Gly Asp Leu Asn Ile  
260 265 270  
Val Asp Asp Gln Tyr Trp Thr Pro Leu His Leu Ala Ala Lys Tyr Gly  
275 280 285  
Gln Thr Asn Leu Val Lys Leu Leu Leu Met His Gln Ala Asn Pro His

290                      295                      300  
Leu Val Asn Cys Asn Glu Glu Lys Ala Ser Asp Ile Ala Ala Ser Glu  
305                      310                      315                      320  
Phe Ile Glu Glu Met Leu Leu Lys Ala Glu Ile Ala Trp Glu Glu Lys  
                         325                      330                      335  
Met Lys Glu Pro Leu Ser Ala Ser Thr Leu Ala Gln Glu Glu Pro Tyr  
                         340                      345                      350  
Glu Glu Ile Ile His Asp Leu Pro Val Leu Ser Ser Lys Leu Ser Pro  
                         355                      360                      365  
Leu Val Leu Pro Ile Ala Lys Gln Asp Ser Leu Leu Glu Lys Asp Ile  
                         370                      375                      380  
Met Phe Lys Asp Ala Thr Lys Gly Leu Cys Lys Gln Gln Ser Gln Asp  
385                      390                      395                      400  
Ser Ile Pro Glu Asn Pro Met Met Ser Gly Ser Thr Lys Pro Glu Gln  
                         405                      410                      415  
Val Lys Leu Met Pro Pro Ala Pro Asn Asp Asp Leu Ala Thr Leu Ser  
                         420                      425                      430  
Glu Leu Asn Asp Gly Ser Leu Leu Tyr Glu Ile Gln Lys Arg Phe Gly  
                         435                      440                      445  
Asn Asn Gln Ile Tyr Thr Phe Ile Gly Asp Ile Leu Leu Leu Val Asn  
                         450                      455                      460  
Pro Tyr Lys Glu Leu Pro Ile Tyr Ser Ser Met Val Ser Gln Leu Tyr  
465                      470                      475                      480  
Phe Ser Ser Ser Gly Lys Leu Cys Ser Ser Leu Pro Pro His Leu Phe  
                         485                      490                      495  
Ser Cys Val Glu Arg Ala Phe His Gln Leu Phe Arg Glu Gln Arg Pro  
                         500                      505                      510  
Gln Cys Phe Ile Leu Ser Gly Glu Arg Gly Ser Gly Lys Ser Glu Ala  
                         515                      520                      525

Ser Lys Gln Ile Ile Arg His Leu Thr Cys Arg Ala Gly Ala Ser Arg  
530 535 540  
Ala Thr Leu Asp Ser Arg Phe Lys His Val Val Cys Ile Leu Glu Ala  
545 550 555 560  
Phe Gly His Ala Lys Thr Thr Leu Asn Asp Leu Ser Ser Cys Phe Ile  
565 570 575  
Lys Tyr Phe Glu Leu Gln Phe Cys Glu Arg Lys Gln Gln Leu Thr Gly  
580 585 590  
Ala Arg Ile Tyr Thr Tyr Leu Leu Glu Lys Ser Arg Leu Val Ser Gln  
595 600 605  
Pro Leu Gly Gln Ser Asn Phe Leu Ile Phe Tyr Leu Leu Met Asp Gly  
610 615 620  
Leu Ser Ala Glu Glu Lys Tyr Gly Leu His Leu Asn Asn Leu Cys Ala  
625 630 635 640  
His Arg Tyr Leu Asn Gln Thr Ile Gln Asp Asp Ala Ser Thr Gly Glu  
645 650 655  
Arg Ser Leu Asn Arg Glu Lys Leu Ala Val Leu Lys Arg Ala Leu Asn  
660 665 670  
Val Val Gly Phe Ser Ser Leu Glu Val Glu Asn Leu Phe Val Ile Leu  
675 680 685  
Ala Ala Ile Leu His Leu Gly Asp Ile Arg Phe Thr Ala Leu Asn Glu  
690 695 700  
Gly Asn Ser Ala Phe Val Ser Asp Leu Gln Leu Leu Glu Gln Val Ala  
705 710 715 720  
Gly Met Leu Gln Val Ser Thr Asp Glu Leu Ala Ser Ala Leu Thr Thr  
725 730 735  
Asp Ile Gln Tyr Phe Lys Gly Asp Met Ile Ile Arg Arg His Thr Ile  
740 745 750  
Gln Ile Ala Glu Phe Phe Arg Asp Leu Leu Ala Lys Ser Leu Tyr Ser

755	760	765
Arg Leu Phe Ser Phe Leu Val Asn Thr Met Asn Ser Cys Leu His Ser		
770	775	780
Gln Asp Glu Gln Lys Ser Met Gln Thr Leu Asp Ile Gly Ile Leu Asp		
785	790	795
Ile Phe Gly Phe Glu Glu Phe Gln Lys Asn Glu Phe Glu Gln Leu Cys		
805	810	815
Val Asn Met Thr Asn Glu Lys Met His His Tyr Ile Asn Glu Val Leu		
820	825	830
Phe Leu His Glu Gln Val Glu Cys Val Gln Glu Gly Val Thr Met Glu		
835	840	845
Thr Ala Tyr Ser Ala Gly Asn Gln Asn Gly Val Leu Asp Phe Phe Phe		
850	855	860
Gln Lys Pro Ser Gly Phe Leu Thr Leu Leu Asp Glu Glu Ser Gln Met		
865	870	875
Ile Trp Ser Val Glu Ser Asn Phe Pro Lys Lys Thr Thr Lys Ser Pro		
885	890	895
Arg Ile Leu Lys His Lys Cys Gly Val Leu Pro His Glu Gly Trp Glu		
900	905	910
Trp Glu Cys Cys Pro Gln Arg Pro Arg Tyr Ser Leu His His His Ala		
915	920	925
Leu Arg Arg Lys Gly Asn Val		
930	935	

&lt;210&gt; 3065

&lt;211&gt; 523

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3065

Met	Ile	Asn	Asp	Leu	His	Arg	Ala	Ile	Gln	Arg	Thr	Gln	Ser	Ala	Met
1				5				10					15		
Phe	Asn	Gln	Val	Leu	Ile	Leu	Ile	Ser	Thr	Leu	Leu	Cys	Leu	Ile	Phe
			20					25					30		
Thr	Cys	Ile	Cys	Gly	Ile	Gln	His	Leu	Glu	Arg	Ile	Gly	Lys	Lys	Leu
		35					40					45			
Asn	Leu	Phe	Asp	Ser	Leu	Tyr	Phe	Cys	Ile	Val	Thr	Phe	Ser	Thr	Val
	50						55					60			
Gly	Phe	Gly	Asp	Val	Thr	Pro	Glu	Thr	Trp	Ser	Ser	Lys	Leu	Phe	Val
65				70					75				80		
Val	Ala	Met	Ile	Cys	Val	Ala	Leu	Val	Val	Leu	Pro	Ile	Gln	Phe	Glu
				85					90				95		
Gln	Leu	Ala	Tyr	Leu	Trp	Met	Glu	Arg	Gln	Lys	Ser	Gly	Gly	Asn	Tyr
		100						105					110		
Ser	Arg	His	Arg	Ala	Gln	Thr	Glu	Lys	His	Val	Val	Leu	Cys	Val	Ser
		115						120					125		
Ser	Leu	Lys	Ile	Asp	Leu	Leu	Met	Asp	Phe	Leu	Asn	Glu	Phe	Tyr	Ala
	130						135					140			
His	Pro	Arg	Leu	Gln	Asp	Tyr	Tyr	Val	Val	Ile	Leu	Cys	Pro	Thr	Glu
145				150						155				160	
Met	Asp	Val	Gln	Val	Arg	Arg	Val	Leu	Gln	Ile	Pro	Met	Trp	Ser	Gln
				165					170				175		
Arg	Val	Ile	Tyr	Leu	Gln	Gly	Ser	Ala	Leu	Lys	Asp	Gln	Asp	Leu	Leu
			180					185					190		
Arg	Ala	Lys	Met	Asp	Asp	Ala	Glu	Ala	Cys	Phe	Ile	Leu	Ser	Ser	Arg
		195						200					205		
Cys	Glu	Val	Asp	Arg	Thr	Ser	Ser	Asp	His	Gln	Thr	Ile	Leu	Arg	Ala

210 215 220  
Trp Ala Val Lys Asp Phe Ala Pro Asn Cys Pro Leu Tyr Val Gln Ile  
225 230 235 240  
Leu Lys Pro Glu Asn Lys Phe His Ile Lys Phe Ala Asp His Val Val  
245 250 255  
Cys Glu Glu Glu Phe Lys Tyr Ala Met Leu Ala Leu Asn Cys Ile Cys  
260 265 270  
Pro Ala Thr Ser Thr Leu Ile Thr Leu Leu Val His Thr Ser Arg Gly  
275 280 285  
Gln Glu Gly Gln Gln Ser Pro Glu Gln Trp Gln Lys Met Tyr Gly Arg  
290 295 300  
Cys Ser Gly Asn Glu Val Tyr His Ile Val Leu Glu Glu Ser Thr Phe  
305 310 315 320  
Phe Ala Glu Tyr Glu Gly Lys Ser Phe Thr Tyr Ala Ser Phe His Ala  
325 330 335  
His Lys Lys Phe Gly Val Cys Leu Ile Gly Val Arg Arg Glu Asp Asn  
340 345 350  
Lys Asn Ile Leu Leu Asn Pro Gly Pro Arg Tyr Ile Met Asn Ser Thr  
355 360 365  
Asp Ile Cys Phe Tyr Ile Asn Ile Thr Lys Glu Glu Asn Ser Ala Phe  
370 375 380  
Lys Asn Gln Asp Gln Gln Arg Lys Ser Asn Val Ser Arg Ser Phe Tyr  
385 390 395 400  
His Gly Pro Ser Arg Leu Pro Val His Ser Ile Ile Ala Ser Met Gly  
405 410 415  
Thr Val Ala Ile Asp Leu Gln Asp Thr Ser Cys Arg Ser Ala Ser Gly  
420 425 430  
Pro Thr Leu Ser Leu Pro Thr Glu Gly Ser Lys Glu Ile Arg Arg Pro  
435 440 445

Ser Ile Ala Pro Val Leu Glu Val Ala Asp Thr Ser Ser Ile Gln Thr  
 450 455 460  
 Cys Asp Leu Leu Ser Asp Gln Ser Glu Asp Glu Thr Thr Pro Asp Glu  
 465 470 475 480  
 Glu Met Ser Ser Asn Leu Glu Tyr Ala Lys Gly Tyr Pro Pro Tyr Ser  
 485 490 495  
 Pro Tyr Ile Gly Ser Ser Pro Thr Phe Cys His Leu Leu His Glu Lys  
 500 505 510  
 Val Pro Phe Cys Cys Leu Arg Leu Asp Lys Phe  
 515 520

<210> 3066

<211> 452

<212> PRT

<213> Homo sapiens

<400> 3066

Met Pro Asp Leu Pro His Leu Leu Ala Phe Leu Ser Ala Ser Arg Asp  
 1 5 10 15  
 Val Leu Pro Arg Thr Leu Leu Leu Pro Pro Pro Thr Leu Gly Pro Arg  
 20 25 30  
 Asp Glu His Thr Asp Pro Val Gln Ile Gly Arg Val Gln Gln Asp Thr  
 35 40 45  
 Pro Gly Lys Val Leu Ser Ile Val Asn Gln Leu Tyr Leu Glu Thr His  
 50 55 60  
 Arg Gly Trp Gly Arg Glu Gln Thr Pro Gln Glu Thr Glu Pro Glu Ala  
 65 70 75 80  
 Ala Gln Arg His Asp Pro Ala Pro Arg Asn Pro Ala Pro His Gly Val



	85	90	95
Ser Trp Val Lys Gly Pro Leu Ser Pro Glu Val Asp His Pro Gly Pro			
100	105	110	
Ala Leu Ala Ser Leu Leu Glu Glu Glu Glu Glu Asp Leu Glu Gly Lys			
115	120	125	
Glu Glu Gly Arg Glu Asp Asp Pro Glu Glu Glu Gly Pro Glu Asp Val			
130	135	140	
Leu Thr Ile His Val Gln Ser Leu Val Arg Ala Arg Ser Ser Tyr Val			
145	150	155	160
Ala Arg Gln Tyr Arg Ser Leu Arg Val Arg Ile Ala Ser Asp Ser Gly			
165	170	175	
Gly Pro His Gly Ser Gly Asp Pro Ala Thr Glu Leu Leu Gln Asp Val			
180	185	190	
Arg His Leu Leu Thr Asp Leu Gln Asp His Leu Ala Lys Asp Ser Tyr			
195	200	205	
Ile Arg Ala Val Phe Gly Ser Arg Gly Pro Gly Leu Pro Lys Lys Asp			
210	215	220	
Glu Asp Pro Gly Pro Ala Leu Glu Thr Ala Val Cys Gln Ala Val Leu			
225	230	235	240
Ala Pro Leu Lys Pro Ala Leu Trp Thr Arg Leu Arg Thr Leu Arg Ala			
245	250	255	
Pro Glu Leu Arg Arg Leu Arg Arg Arg Gln Thr Ala Leu Arg Ala Gly			
260	265	270	
Ala Gly Pro Pro Gly Ala Gln Gly Pro Gly Pro Glu Gly Gln Ser Pro			
275	280	285	
Ala Pro Ala Leu Arg Ser Arg Ile His Glu Arg Leu Ala His Leu His			
290	295	300	
Ala Ala Cys Ala Pro Arg Arg Lys Val Ala Leu Leu Leu Glu Val Cys			
305	310	315	320

<210> 3067

<211> 306

<212> PRT

<213> Homo sapiens

<400> 3067

出証特 2 0 0 4 - 3 0 5 9 6 6 1

20	25	30
Tyr Lys Asp Leu Pro Pro Lys Pro Gly Thr Met Glu Glu Glu Glu Glu		
35	40	45
Asp Asp Asp Tyr Glu Asn Ser Thr Pro Pro Tyr Lys Asp Leu Pro Pro		
50	55	60
Lys Pro Gly Thr Met Glu Glu Glu Glu Glu Asp Asp Asp Tyr Glu Asn		
65	70	75
Ser Thr Pro Pro Tyr Lys Asp Leu Pro Pro Lys Pro Gly Ser Ser Ala		
85	90	95
Pro Pro Arg Pro Pro Arg Ala Ala Lys Glu Thr Glu Lys Pro Pro Leu		
100	105	110
Pro Cys Lys Pro Arg Asn Met Thr Gly Leu Asp Leu Ala Ala Val Thr		
115	120	125
Cys Pro Pro Pro Gln Leu Ala Val Asn Leu Glu Pro Ser Pro Leu Gln		
130	135	140
Pro Ser Leu Ala Ala Thr Pro Val Pro Trp Leu Asn Gln Arg Ser Gly		
145	150	155
Gly Pro Gly Cys Cys Gln Lys Arg Trp Met Val Tyr Leu Cys Leu Leu		
165	170	175
Val Val Thr Ser Leu Phe Leu Gly Cys Leu Gly Leu Thr Val Thr Leu		
180	185	190
Ile Lys Tyr Gln Glu Leu Met Glu Glu Leu Arg Met Leu Ser Phe Gln		
195	200	205
Gln Met Thr Trp Arg Thr Asn Met Thr Gly Met Ala Gly Leu Ala Gly		
210	215	220
Leu Lys His Asp Ile Ala Arg Val Arg Ala Asp Thr Asn Gln Ser Leu		
225	230	235
Val Glu Leu Trp Gly Leu Leu Asp Cys Arg Arg Ile Thr Cys Pro Glu		
245	250	255

Gly Trp Leu Pro Phe Glu Gly Lys Cys Tyr Tyr Phe Ser Pro Ser Thr  
                   260                                  265                                  270  
 Lys Ser Trp Asp Glu Ala Arg Met Phe Cys Gln Glu Asn Tyr Ser His  
                   275                                  280                                  285  
 Leu Val Ile Ile Asn Ser Phe Ala Glu His Leu Leu Gly Ala Arg Gly  
                   290                                  295                                  300  
 Thr Gln  
 305

<210> 3068

<211> 378

<212> PRT

<213> Homo sapiens

<400> 3068

Met Asp Leu Gly Lys Pro Met Lys Ser Val Leu Val Val Ala Leu Leu  
           1                                  5                                  10                                  15  
 Val Ile Phe Gln Val Cys Leu Cys Gln Asp Glu Val Thr Asp Asp Tyr  
                                   20                                  25                                  30  
 Ile Gly Asp Asn Thr Thr Val Asp Tyr Thr Leu Phe Glu Ser Leu Cys  
                                   35                                  40                                  45  
 Ser Lys Lys Asp Val Arg Asn Phe Lys Ala Trp Phe Leu Pro Ile Met  
                   50                                  55                                  60  
 Tyr Ser Ile Ile Cys Phe Val Gly Leu Leu Gly Asn Gly Leu Val Val  
           65                                  70                                  75                                  80  
 Leu Thr Tyr Ile Tyr Phe Lys Arg Leu Lys Thr Met Thr Asp Thr Tyr  
                                   85                                  90                                  95  
 Leu Leu Asn Leu Ala Val Ala Asp Ile Leu Phe Leu Leu Thr Leu Pro

100	105	110	
Phe Trp Ala Tyr Ser Ala Ala Lys Ser Trp Val Phe Gly Val His Phe			
115	120	125	
Cys Lys Leu Ile Phe Ala Ile Tyr Lys Met Ser Phe Phe Ser Gly Met			
130	135	140	
Leu Leu Leu Leu Cys Ile Ser Ile Asp Arg Tyr Val Ala Ile Val Gln			
145	150	155	160
Ala Val Ser Ala His Arg His Arg Ala Arg Val Leu Leu Ile Ser Lys			
165	170	175	
Leu Ser Cys Val Gly Ile Trp Ile Leu Ala Thr Val Leu Ser Ile Pro			
180	185	190	
Glu Leu Leu Tyr Ser Asp Leu Gln Arg Ser Ser Ser Glu Gln Ala Met			
195	200	205	
Arg Cys Ser Leu Ile Thr Glu His Val Glu Ala Phe Ile Thr Ile Gln			
210	215	220	
Val Ala Gln Met Val Ile Gly Phe Leu Val Pro Leu Leu Ala Met Ser			
225	230	235	240
Phe Cys Tyr Leu Val Ile Ile Arg Thr Leu Leu Gln Ala Arg Asn Phe			
245	250	255	
Glu Arg Asn Lys Ala Ile Lys Val Ile Ile Ala Val Val Val Val Phe			
260	265	270	
Ile Val Phe Gln Leu Pro Tyr Asn Gly Val Val Leu Ala Gln Thr Val			
275	280	285	
Ala Asn Phe Asn Ile Thr Ser Ser Thr Cys Glu Leu Ser Lys Gln Leu			
290	295	300	
Asn Ile Ala Tyr Asp Val Thr Tyr Ser Leu Ala Cys Val Arg Cys Cys			
305	310	315	320
Val Asn Pro Phe Leu Tyr Ala Phe Ile Gly Val Lys Phe Arg Asn Asp			
325	330	335	

Leu Phe Lys Leu Phe Lys Asp Leu Gly Cys Leu Ser Gln Glu Gln Leu  
340 345 350  
Arg Gln Trp Ser Ser Cys Arg His Ile Arg Arg Ser Ser Met Ser Val  
355 360 365  
Glu Ala Glu Thr Thr Thr Thr Phe Ser Pro  
370 375

<210> 3069

<211> 685

<212> PRT

<213> Homo sapiens

<400> 3069

Met Leu Leu Arg Glu Ser Leu Gly Asn Met Asn Cys Arg Thr Thr Met  
1 5 10 15  
Ile Ala His Ile Ser Ala Ala Val Gly Ser Tyr Ala Glu Thr Leu Ser  
20 25 30  
Thr Ile Gln Ile Ala Ser Arg Val Leu Arg Met Lys Lys Lys Lys Thr  
35 40 45  
Lys Tyr Thr Ser Ser Ser Ser Gly Gly Glu Ser Ser Cys Glu Glu Gly  
50 55 60  
Arg Met Arg Arg Pro Thr Gln Leu Arg Pro Phe His Thr Arg Ala Thr  
65 70 75 80  
Val Asp Pro Asp Phe Pro Ile Ala His Leu Ser Ser Asp Pro Asp Tyr  
85 90 95  
Ser Ser Ser Ser Glu Gln Ser Cys Asp Thr Val Ile Tyr Ile Gly Pro  
100 105 110  
Asn Gly Thr Ala Leu Ser Asp Lys Glu Leu Thr Asp Asn Glu Gly Pro

115	120	125
Pro Asp Phe Val Pro Ile Val	Pro Ala Leu Gln Lys Thr Arg Gly Asp	
130	135	140
Ser Arg Pro Ala Glu Ala Gly Glu Ala Ala Ala Gly Lys Ser Glu Arg		
145	150	155
Asp Cys Leu Lys Cys Asn Thr Phe Ala Glu Leu Gln Glu Arg Leu Asp		
165	170	175
Cys Ile Asp Gly Ser Glu Glu Pro Ser Ser Phe Pro Phe Glu Glu Leu		
180	185	190
Pro Ala Gln Phe Gly Pro Glu Gln Ala Ser Arg Gly Pro Arg Leu Ser		
195	200	205
Gln Ala Ala Gly Ala Ser Pro Leu Ser Glu Ser Asp Lys Glu Asp Asn		
210	215	220
Gly Ser Glu Gly Gln Leu Thr Asn Arg Glu Gly Pro Glu Leu Pro Ala		
225	230	235
Ser Lys Met Gln Arg Ser His Ser Pro Val Pro Ala Ala Ala Pro Ala		
245	250	255
His Ser Pro Ser Pro Ala Ser Pro Arg Ser Val Pro Gly Ser Ser Ser		
260	265	270
Gln His Ser Ala Ser Pro Leu Val Gln Ser Pro Ser Leu Gln Ser Ser		
275	280	285
Arg Glu Ser Leu Asn Ser Cys Gly Phe Val Glu Gly Lys Pro Arg Pro		
290	295	300
Met Gly Ser Pro Arg Leu Gly Ile Ala Ser Leu Ser Lys Thr Ser Glu		
305	310	315
Tyr Lys Pro Pro Ser Ser Pro Ser Gln Arg Cys Lys Val Tyr Thr Gln		
325	330	335
Lys Gly Val Leu Pro Ser Pro Ala Pro Leu Pro Pro Ser Ser Lys Asp		
340	345	350

Ser Gly Val Ala Ser Arg Glu Ser Leu Leu Gln Pro Glu Val Arg Thr  
355 360 365  
Pro Pro Val Gly Met Ser Pro Gln Val Leu Lys Lys Ser Met Ser Ala  
370 375 380  
Gly Ser Glu Gly Phe Pro Glu Thr Pro Val Asp Asp Glu Gln Gln Ala  
385 390 395 400  
Ala Thr Pro Ser Glu Ser Lys Lys Glu Ile Leu Ser Thr Thr Met Val  
405 410 415  
Thr Val Gln Gln Pro Leu Glu Leu Asn Gly Glu Asp Glu Leu Val Phe  
420 425 430  
Thr Leu Val Glu Glu Leu Thr Ile Ser Gly Val Leu Asp Ser Gly Arg  
435 440 445  
Pro Thr Ser Ile Ile Ser Phe Asn Ser Asp Cys Ser Ala Arg Ala Leu  
450 455 460  
Ala Ser Gly Ser Arg Pro Val Ser Ile Ile Ser Ser Ile Ser Glu Asp  
465 470 475 480  
Leu Glu Cys Tyr Ser Ser Thr Ala Pro Val Ser Glu Val Ser Ile Thr  
485 490 495  
Gln Phe Leu Pro Leu Pro Lys Met Ser Leu Asp Glu Lys Ala Gln Asp  
500 505 510  
Ala Gly Ser Arg Arg Ser Ser Ile Ser Ser Trp Leu Ser Glu Met Ser  
515 520 525  
Ala Gly Ser Glu Gly Glu Gln Ser Cys His Ser Phe Ile Ala Gln Thr  
530 535 540  
Cys Phe Gly His Gly Glu Ala Met Ala Glu Pro Val Ala Ser Glu Phe  
545 550 555 560  
Val Ser Ser Leu Gln Asn Thr Ala Val Val Cys Arg Glu Lys Pro Lys  
565 570 575  
Ala Ser Pro Asp Asn Leu Leu Ile Leu Ser Glu Met Gly Asp Asp Ser



580	585	590	
Phe Asn Lys Ala Ala Pro Ile Lys Gly Cys Lys Ile Ser Thr Val Ser			
595	600	605	
Lys Ala Met Val Thr Ile Ser Asn Thr Ala Asn Leu Ser Ser Cys Glu			
610	615	620	
Gly Tyr Ile Pro Met Lys Thr Asn Ile Thr Val Tyr Pro Cys Ile Ala			
625	630	635	640
Met Ser Pro Arg Asn Ile Gln Glu Pro Glu Ala Pro Thr Ala Thr Pro			
645	650	655	
Lys Ala Gly Pro Thr Leu Ala Gln Ser Arg Glu Ser Lys Glu Asn Ser			
660	665	670	
Ala Lys Lys Glu Met Lys Phe Glu Asp Pro Trp Leu Lys			
675	680	685	

&lt;210&gt; 3070

&lt;211&gt; 719

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3070

Met Met Gln Gly Asn Lys Lys Cys Thr Asp Ala Phe Ser Asp Ser Ser
1                      5                      10                      15
Ser Ile Gly Ser Val Leu Asp Asp Ala Asp Arg Glu Val Ser Ser Leu
20                      25                      30
Thr Asp Arg Ala Phe Arg Ser Leu Cys Ile Ser Glu Asp Thr Ser Phe
35                      40                      45
His Asp Ser Tyr Leu Ala Val Ser Pro Asp Ile Thr Arg Gln Val Phe
50                      55                      60

Gly Thr Phe His Gln Arg Thr Val Gly His Thr Gln Arg Lys Ser Gly  
 65 70 75 80  
 Ile Trp Ser Gln Leu Pro Ser Gln Gly Thr Glu His Ser Gly Trp Ala  
 85 90 95  
 Ala Thr Phe Gln Gln Leu Pro Lys Tyr Val Gln Gly Glu Glu Lys Tyr  
 100 105 110  
 Pro Lys Thr Ser Pro Pro Pro Thr Pro Val Gln Arg Arg Leu Glu Val  
 115 120 125  
 Pro Val Ser Gly Leu Arg Ser Ser Asn Lys Pro Val Ser Lys Val Ser  
 130 135 140  
 Thr Leu Ile Lys Ser Phe Asp Arg Thr Glu Ser Gln Arg Cys Glu Ser  
 145 150 155 160  
 Arg Pro Thr Ala Ser Lys Pro Pro Ala Leu Lys Asn Pro Pro Lys Phe  
 165 170 175  
 Ala Pro Leu Pro Glu Asn Ser Val Asn Phe Cys Phe Asp Ser Ala Phe  
 180 185 190  
 Leu Thr Val Arg Arg Val Pro Ala Glu Val Ser Asn Thr His Gln Asn  
 195 200 205  
 Ser Tyr Gln Pro Gly Arg Lys His Gly Glu Gln Glu Ser Ser Lys Asn  
 210 215 220  
 Pro Glu Met Ala Cys His Gly Ser Ser Ser Phe Leu Pro Ala Ala Asn  
 225 230 235 240  
 Asp Thr Ala Thr Leu Cys Glu Ser Lys Phe Pro Ser Pro His His Lys  
 245 250 255  
 Pro Val Thr Gly Glu Pro Gly Arg Gly Lys Gly Thr Phe Leu His Ser  
 260 265 270  
 Glu Asn Ser Ala Phe Glu Ser Trp Asn Ala His Gln Pro Lys Leu Leu  
 275 280 285  
 Glu Arg Lys Asp Thr Ala Gly Thr Val Pro Glu Ser Lys Ala Pro Lys

290 295 300  
His Tyr Gly Asp Thr Thr Leu Leu Arg Glu Pro Cys Pro Pro Glu Arg  
305 310 315 320  
Thr Val Ser Pro Cys Gln Val Gln Ala Ser Cys Ser Gln Glu Glu Asn  
325 330 335  
Arg Leu Ala Ala Gly Ala Leu Ser Thr Ser Ile Pro Trp Gly Cys Arg  
340 345 350  
Asp Pro Gly Ala Gln Val Phe Ala Val Glu Gly Lys Ala Pro Ser Ser  
355 360 365  
Gln Pro Asp Ser Gln Glu Lys Pro Ala Gln Pro Pro Trp Arg Lys Pro  
370 375 380  
Lys Thr Gly Lys Lys Gly Lys Glu Ser Leu Gln Asp Thr Leu Glu Glu  
385 390 395 400  
Lys Thr Gln Thr Asn Gln Arg Gly Pro Pro Leu Tyr Thr Lys His Asn  
405 410 415  
Pro Gln Glu Gln Phe Ser Glu Asn Asn Ala Leu Asp Leu Pro Val Glu  
420 425 430  
Pro Asn Glu His Tyr Asp Pro Pro Phe Asn Ile Ser Lys Leu Leu Thr  
435 440 445  
Pro Ile Ile Pro Ser Lys His Ala Leu Asp Ser Ala Asp Ser Gln Pro  
450 455 460  
Ala Glu Arg Thr Pro Ser Pro Pro Gly Gln Leu Asn Gly Tyr Gln Glu  
465 470 475 480  
Lys Glu Pro Ser Glu Cys Gln Ser Arg Asp Ser Tyr Lys Ser Lys Ala  
485 490 495  
Pro Ser Leu Leu Phe Asn Leu Lys Asp Val Arg Lys Arg Val Lys Ser  
500 505 510  
Thr Tyr Ser Ser Ser Pro Leu Leu Lys Val Leu Asp Glu Lys Thr Arg  
515 520 525

Gly Lys Val Asp Gly Lys Gln Glu Pro Val Ser Asn Gly Val Ile Leu  
530 535 540  
Pro Asn Gly Leu Glu Glu Ser Pro Pro Asn Glu Leu Ser Lys Glu Arg  
545 550 555 560  
Pro Ala Asp Asp Pro Thr Ala Ser His Ile Asn Pro Gln Lys Asp Pro  
565 570 575  
Thr Ala Asp Pro Ser Glu Pro Ser Ala Asp Ser Tyr Leu Thr Leu Ser  
580 585 590  
Thr Ala Pro Thr Ile Ala Lys Ala Pro Phe Tyr Val Asn Gly Glu Ala  
595 600 605  
Ala Glu Arg Ser Ser Tyr Glu Asn Lys Glu Val Glu Gly Glu Leu Glu  
610 615 620  
Met Gly Pro Ala Gly Ser Ser Trp Cys Pro Asp Ser Arg Glu His Arg  
625 630 635 640  
Pro Arg Lys His Leu Ser Leu Arg Leu Cys Asn Arg Asp Pro Glu Pro  
645 650 655  
Gly Gly Ala Thr Glu Lys Val Lys Thr His Gln Leu Glu Asn Gly Leu  
660 665 670  
Ser Arg Ser Val Ser Gln Glu Thr Glu Pro Glu Arg Glu Ala Gly Leu  
675 680 685  
Gln Asn Thr His Thr His Thr His Thr His Thr His Thr His Asp His  
690 695 700  
Gln His Ile Leu Ser Leu Phe Arg Ser Ile Lys Ser Arg Arg Gln  
705 710 715

&lt;210&gt; 3071

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3071

Met	Leu	Thr	Gln	Arg	Val	Glu	Ile	Asp	Arg	Thr	Phe	Ala	Glu	Ala	Ala
1				5					10					15	
Gly	Ser	Gly	Glu	Thr	Leu	Ser	Val	Asp	Gln	Leu	Val	Thr	Phe	Leu	Gln
			20					25					30		
His	Gln	Gln	Arg	Glu	Glu	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Leu	Ser	Leu
			35					40					45		
Ile	Glu	His	Tyr	Glu	Pro	Ser	Glu	Thr	Ala	Lys	Ala	Gln	Arg	Gln	Met
	50						55					60			
Thr	Lys	Asp	Gly	Phe	Leu	Met	Tyr	Leu	Leu	Ser	Ala	Asp	Gly	Ser	Ala
	65				70					75				80	
Phe	Ser	Leu	Ala	His	Arg	Arg	Val	Tyr	Gln	Asp	Met	Gly	Gln	Pro	Leu
				85					90					95	
Ser	His	Tyr	Leu	Val	Ser	Ser	Ser	His	Asn	Thr	Tyr	Leu	Leu	Glu	Asp
			100						105					110	
Gln	Leu	Ala	Gly	Pro	Ser	Ser	Thr	Glu	Ala	Tyr	Ile	Arg	Ala	Leu	Cys
			115					120						125	
Lys	Gly	Cys	Arg	Cys	Leu	Glu	Leu	Asp	Cys	Trp	Asp	Gly	Pro	Asn	Gln
	130						135					140			
Glu	Pro	Ile	Ile	Tyr	His	Gly	Tyr	Thr	Phe	Thr	Ser	Lys	Ile	Leu	Phe
	145				150					155				160	
Cys	Asp	Val	Leu	Arg	Ala	Ile	Arg	Asp	Tyr	Ala	Phe	Lys	Ala	Ser	Pro
				165					170					175	
Tyr	Pro	Val	Ile	Leu	Ser	Leu	Glu	Asn	His	Cys	Thr	Leu	Glu	Gln	Gln
			180						185					190	
Arg	Val	Met	Ala	Arg	His	Leu	His	Ala	Ile	Leu	Gly	Pro	Met	Leu	Leu
			195						200					205	

Asn Arg Pro Leu Asp Gly Val Thr Asn Ser Leu Pro Ser Pro Glu Gln  
210 215 220  
Leu Lys Gly Lys Ile Leu Leu Lys Gly Lys Lys Leu Gly Gly Leu Leu  
225 230 235 240  
Pro Pro Gly Gly Glu Gly Gly Pro Glu Ala Thr Val Val Ser Asp Glu  
245 250 255  
Asp Glu Ala Ala Val Met Glu Asp Glu Ala Val Arg Ser Arg Val Gln  
260 265 270  
His Lys Pro Lys Glu Asp Lys Leu Arg Leu Ala Gln Glu Leu Ser Asp  
275 280 285  
Met Val Ile Tyr Cys Lys Ser Val His Phe Gly Gly Phe Ser Ser Pro  
290 295 300  
Gly Thr Pro Gly Gln Ala Phe Tyr Glu Met Ala Ser Phe Ser Glu Asn  
305 310 315 320  
Arg Ala Leu Arg Leu Leu Gln Glu Ser Gly Asn Gly Phe Val Arg His  
325 330 335  
Asn Val Gly His Leu Ser Arg Ile Tyr Pro Ala Gly Trp Arg Thr Asp  
340 345 350  
Ser Ser Asn Tyr Ser Pro Val Glu Met Trp Asn Gly Gly Cys Gln Ile  
355 360 365  
Val Ala Leu Asn Phe Gln Thr Pro Gly Pro Glu Met Asp Val Tyr Gln  
370 375 380  
Gly Arg Phe Gln Asp Asn Gly Ala Cys Gly Tyr Val Leu Lys Pro Ala  
385 390 395 400  
Phe Leu Arg Asp Pro Asn Gly Thr Phe Asn Pro Arg Ala Leu Ala Gln  
405 410 415  
Gly Pro Trp Trp Ala Arg Lys Arg Leu Asn Ile Arg Val Ile Ser Gly  
420 425 430  
Gln Gln Leu Pro Lys Val Asn Lys Asn Lys Asn Ser Ile Val Asp Pro

435                      440                      445  
 Lys Val Thr Val Glu Ile His Gly Val Ser Arg Asp Val Ala Ser Arg  
 450                      455                      460  
 Gln Thr Ala Val Ile Thr Asn Asn Gly Phe Asn Pro Trp Arg Asp Thr  
 465                      470                      475                      480  
 Glu Phe Ala Phe Glu Val Val Val Pro Asp Leu Ala Leu Ile Arg Phe  
                          485                      490                      495  
 Leu Val Glu Asp Tyr Asp Ala Ser Ser Lys Asn Asp Phe Ile Gly Gln  
                          500                      505                      510  
 Ser Thr Ile Pro Leu Asn Ser Leu Lys Gln Gly Tyr Arg His Val His  
                          515                      520                      525  
 Leu Met Ser Lys Asn Gly Asp Gln His Pro Ser Ala Thr Leu Phe Val  
                          530                      535                      540  
 Lys Ile Ser Leu Gln Asp  
 545                      550

<210> 3072

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3072

Met Val Leu Leu Gly Ile Tyr Ala Leu Asp Ser Arg Lys His Ala Asn  
 1                      5                      10                      15  
 Arg Ala Asn Lys Cys Ile Phe Ile Phe Val Ser Ile Leu Thr Trp Ser  
                          20                      25                      30  
 Arg Lys Ile Pro Thr Lys Asn Pro Gln Cys Arg Ser Lys Lys Ile Ser  
                          35                      40                      45

Gly Cys Val Pro Leu Gln Gly Ser Ala Phe Cys Cys Leu Lys Glu Arg

50

55

60

Lys Val His Pro Phe Arg Val Leu Leu Phe Glu Lys Ser Asn Val Glu

65

70

75

80

Val Asp Ala Asp Phe Gly Asn Thr Phe Ala Glu His Ala Tyr His Gln

85

90

95

Thr Trp Met Met Leu Gly Ser Val Phe Ala Leu Phe Phe Phe Gln Asp

100

105

110

Ser Val Phe Val Ala Gln Ala Gly Val Trp Trp Tyr Phe Pro Pro Arg

115

120

125

Ser Leu Gly Leu Lys Arg Ser Phe Phe Ile Phe Leu Ser Gln Glu Arg

130

135

140

Val Trp Trp

145

<210> 3073

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3073

Met Ile Ser Ala Val Pro Phe Ile Leu Ser Leu His Ser Thr Glu Trp

1

5

10

15

Ser Pro Pro Leu His Ala Pro Gly Ala His Val Pro Arg Gln Trp Gly

20

25

30

Thr His Ser Asp Tyr Gly Glu Leu Cys Pro Thr Gln Ala Ser Pro Glu

35

40

45

Met Pro Thr Gly Tyr Asp Cys Arg Arg Pro Val Cys Glu Gly His Cys



50                      55                      60  
 Gly Asn Ser Pro Ser Pro Pro Ala Arg Arg Leu Gln Ala Thr Thr Ala  
 65                      70                      75                      80  
 Gly Ser Gln Val Leu Pro Ala Thr Pro Arg Pro Gly Gln Gly Thr Arg  
                     85                      90                      95  
 Thr Pro Val Ile Leu  
                     100

<210> 3074

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3074

Met Ala Ser Glu Ser Ser Pro Leu Leu Ala Tyr Arg Leu Leu Gly Glu  
 1                      5                      10                      15  
 Glu Gly Val Ala Leu Pro Ala Asn Gly Ala Gly Gly Pro Gly Gly Ala  
                     20                      25                      30  
 Ser Ala Arg Lys Leu Ser Thr Phe Leu Gly Val Val Val Pro Thr Val  
                     35                      40                      45  
 Leu Ser Met Phe Ser Ile Val Val Phe Leu Arg Ile Asp Ala Thr Gly  
                     50                      55                      60  
 Pro Ser Gly Leu Arg Val Leu Pro Gln Gly Tyr Gly Trp Asn Leu Leu  
 65                      70                      75                      80  
 Tyr Gly Ser Leu Leu Leu Gly Leu Val Gly Gly Val Cys Thr Leu Gly  
                     85                      90                      95  
 Ala Gly Leu Tyr Ala Arg Ala Ser Phe Leu Thr Phe Leu Leu Val Ser  
                     100                      105                      110

Gly Ser Leu Ala Ser Val Leu Ile Ser Phe Val Ala Val Gly Pro Arg

115

120

125

Asp Ile Arg Leu Thr Pro Arg Pro Pro Leu

130

135

<210> 3075

<211> 492

<212> PRT

<213> Homo sapiens

<400> 3075

Met Ala Thr Arg Pro Ala Gly Gln Asn Leu Gln Gly Ile Glu Asp Lys

1

5

10

15

Ile Thr Lys Met Lys Val Thr Met Val Ala Trp Asp Arg His Asp Asn

20

25

30

Thr Val Ile Thr Ala Val Asn Asn Met Thr Leu Lys Val Trp Asn Ser

35

40

45

Tyr Thr Gly Gln Leu Ile His Val Leu Met Gly His Glu Asp Glu Val

50

55

60

Phe Val Leu Glu Pro His Pro Phe Asp Pro Arg Val Leu Phe Ser Ala

65

70

75

80

Gly His Asp Gly Asn Val Ile Val Trp Asp Leu Ala Arg Gly Val Lys

85

90

95

Ile Arg Ser Tyr Phe Asn Met Ile Glu Gly Gln Gly His Gly Ala Val

100

105

110

Phe Asp Cys Lys Cys Ser Pro Asp Gly Gln His Phe Ala Cys Thr Asp

115

120

125

Ser His Gly His Leu Leu Ile Phe Gly Phe Gly Ser Ser Ser Lys Tyr

130 135 140  
Asp Lys Ile Ala Asp Gln Met Phe Phe His Ser Asp Tyr Arg Pro Leu  
145 150 155 160  
Ile Arg Asp Ala Asn Asn Phe Val Leu Asp Glu Gln Thr Gln Gln Ala  
165 170 175  
Pro His Leu Met Pro Pro Pro Phe Leu Val Asp Val Asp Gly Asn Pro  
180 185 190  
His Pro Ser Arg Tyr Gln Arg Leu Val Pro Gly Arg Glu Asn Cys Arg  
195 200 205  
Glu Glu Gln Leu Ile Pro Gln Met Gly Val Thr Ser Ser Gly Leu Asn  
210 215 220  
Gln Val Leu Ser Gln Gln Ala Asn Gln Glu Ile Ser Pro Leu Asp Ser  
225 230 235 240  
Met Ile Gln Arg Leu Gln Arg Glu Gln Asp Leu Arg Arg Ser Gly Glu  
245 250 255  
Ala Gly Ile Ser Asn Thr Ser Arg Leu Ser Arg Gly Ser Ile Ser Ser  
260 265 270  
Thr Ser Glu Val His Ser Pro Pro Asn Val Gly Leu Arg Arg Ser Gly  
275 280 285  
Gln Ile Glu Gly Val Arg Gln Met His Ser Asn Ala Pro Arg Ser Glu  
290 295 300  
Ile Ala Thr Glu Arg Asp Leu Val Ala Trp Ser Arg Arg Val Val Val  
305 310 315 320  
Pro Glu Leu Ser Ala Gly Val Ala Ser Arg Gln Glu Glu Trp Arg Thr  
325 330 335  
Ala Lys Gly Glu Glu Glu Ile Lys Thr Tyr Arg Ser Glu Glu Lys Arg  
340 345 350  
Lys His Leu Thr Val Pro Lys Glu Asn Lys Ile Pro Thr Val Ser Lys  
355 360 365

Asn His Ala His Glu His Phe Leu Asp Leu Gly Glu Ser Lys Lys Gln  
 370 375 380  
 Gln Thr Asn Gln His Asn Tyr Arg Thr Arg Ser Ala Leu Glu Glu Thr  
 385 390 395 400  
 Pro Arg Pro Ser Glu Glu Ile Glu Asn Gly Ser Ser Ser Ser Asp Glu  
 405 410 415  
 Gly Glu Val Val Ala Val Ser Gly Gly Thr Ser Glu Glu Glu Glu Arg  
 420 425 430  
 Ala Trp His Ser Asp Gly Ser Ser Ser Asp Tyr Ser Ser Asp Tyr Ser  
 435 440 445  
 Asp Trp Thr Ala Asp Ala Gly Ile Asn Leu Gln Pro Pro Lys Lys Val  
 450 455 460  
 Pro Lys Asn Lys Thr Lys Lys Ala Glu Ser Ser Ser Asp Glu Glu Glu  
 465 470 475 480  
 Glu Ser Glu Lys Lys Gln Lys Lys Gln Ile Lys Lys  
 485 490

<210> 3076

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3076

Met Tyr Tyr Glu Asn Ser Tyr Ala Leu Ala Val Leu Ser Asn Tyr Asp  
 1 5 10 15  
 Ala Asn Lys Thr Gly Leu Lys Glu Leu Pro Met Arg Asn Leu Gln Glu  
 20 25 30  
 Ile Leu His Gly Ala Val Arg Phe Ser Asn Asn Pro Ala Leu Cys Asn

35 40 45  
Val Glu Ser Ile Gln Trp Arg Asp Ile Val Ser Ser Asp Phe Leu Ser  
50 55 60  
Asn Met Ser Met Asp Phe Gln Asn His Leu Gly Ser Cys Lys Cys Arg  
65 70 75 80  
Ile His Thr Ile Ser Ala Ser Ser Ser Tyr Gly Gly Gln Leu Tyr Ser  
85 90 95  
Thr Gly Ala Gly Glu Arg Ser His Val  
100 105

&lt;210&gt; 3077

&lt;211&gt; 474

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3077

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala  
1 5 10 15  
Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val  
20 25 30  
Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala  
35 40 45  
Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala  
50 55 60  
Asp Ala Met Val Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser  
65 70 75 80  
Ala Ala Tyr Val Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly  
85 90 95

Cys Gly Ile Thr Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys  
100 105 110  
Ala Val Asn Ala Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp  
115 120 125  
Ile Val Gly Asp Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly  
130 135 140  
Gln Leu Arg Trp Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr  
145 150 155 160  
Ala Ala Val Leu Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly  
165 170 175  
Lys Pro Val Trp Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val  
180 185 190  
Ser Cys Ile Asp Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp  
195 200 205  
Ala Leu Glu Ile Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu  
210 215 220  
Lys Gln Met Leu Ala Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala  
225 230 235 240  
Trp Leu Gly Tyr Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala  
245 250 255  
Leu Lys Asp Gly Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu  
260 265 270  
Gln Asp Asp Met Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro  
275 280 285  
Glu Lys Thr Leu Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu  
290 295 300  
Ala Val Glu Trp Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile  
305 310 315 320  
Glu Glu Pro Thr Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser

325 330 335  
Lys Cys His Asn Arg Val Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala  
340 345 350  
Leu Gln Phe Leu Gln Ile Asp Ser Cys Arg Leu Gly Ser Val Asn Glu  
355 360 365  
Asn Leu Ser Val Leu Leu Met Ala Lys Lys Phe Glu Ile Pro Val Cys  
370 375 380  
Pro His Ala Gly Gly Val Gly Leu Cys Glu Leu Val Gln His Leu Ile  
385 390 395 400  
Ile Phe Asp Tyr Ile Ser Val Ser Ala Ser Leu Glu Asn Arg Val Cys  
405 410 415  
Glu Tyr Val Asp His Leu His Glu His Phe Lys Tyr Pro Val Met Ile  
420 425 430  
Gln Arg Ala Ser Tyr Met Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu  
435 440 445  
Met Lys Glu Glu Ser Val Lys Lys His Gln Tyr Pro Asp Gly Glu Val  
450 455 460  
Trp Lys Lys Leu Leu Pro Ala Gln Glu Asn  
465 470

&lt;210&gt; 3078

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3078

Met Asp Thr Ile Glu Arg Arg Leu Asp Ala Leu Glu His Arg Gly Val

1

5

10

15

出証特 2 0 0 4 - 3 0 5 9 6 6 1



1	5	10	15
Ser Gln Glu Thr Leu Glu Ile Asn Asn Asp Lys Val Ala Glu Ser Leu			
20	25	30	
Gly Ile Thr Glu Phe Leu Arg Lys Lys Glu Ile His Pro Asp Asn Leu			
35	40	45	
Gly Pro Lys His Leu Ser Arg Asp Met Asp Gly Glu Gln Leu Glu Gly			
50	55	60	
Ala Ser Ser Glu Lys Arg Glu Arg Glu Ala Ala Glu Glu Gly Leu Ala			
65	70	75	80
Ser Val Lys Arg Pro Arg Arg Glu Ala Leu Ser Asn Asn Thr Thr Glu			
85	90	95	
Ser Leu Ala Ala Asn Ser Arg Gly Arg Glu Lys Pro Arg Pro Leu His			
100	105	110	
Ala Leu Ala Ala Gly Phe Ser Pro Pro Val Asn Val Thr Val Ser Pro			
115	120	125	
Arg Ser Glu Glu Ser His Thr Thr Thr Val Ser Gly Gly Asn Gly Ser			
130	135	140	
Val Phe Gln Ala Gly Pro Gln Leu Gln Ala Leu Ala Asn Leu Glu Ala			
145	150	155	160
Arg Arg Gly Ser Ile Gly Ala Ala Leu Ser Ser Arg Asp Val Ser Gly			
165	170	175	
Leu Pro Val Tyr Ala Gln Ser Gly Glu Pro Arg Arg Leu Thr Gln Ala			
180	185	190	
Gln Val Ala Ala Phe Pro Gly Glu Asn Ala Leu Glu His Ser Ser Asp			
195	200	205	
Gln Asp Thr Trp Asp Ser Leu Arg Ser Pro Gly Phe Cys Ser Pro Leu			
210	215	220	
Ser Ser Gly Gly Gly Ala Glu Ser Leu Pro Pro Gly Gly Pro Gly His			
225	230	235	240

Ala Glu Ala Gly His Leu Gly Lys Val Cys Asp Phe His Leu Asn His  
245 250 255  
Gln Gln Pro Ser Pro Thr Ser Val Leu Pro Thr Glu Val Ala Ala Pro  
260 265 270  
Pro Leu Glu Lys Ile Leu Ser Val Asp Ser Val Ala Val Asp Cys Ala  
275 280 285  
Tyr Arg Thr Val Pro Lys Pro Gly Pro Gln Pro Gly Pro His Gly Ser  
290 295 300  
Leu Leu Thr Glu Gly Cys Leu Arg Ser Leu Ser Gly Asp Leu Asn Arg  
305 310 315 320  
Phe Pro Cys Gly Met Glu Val His Ser Gly Gln Arg Glu Leu Glu Ser  
325 330 335  
Val Val Ala Val Gly Glu Ala Met Ala Phe Glu Ile Ser Asn Gly Ser  
340 345 350  
His Glu Leu Leu Ser Gln Gly Gln Lys Gln Ile Phe Ile Gln Thr Ser  
355 360 365  
Asp Gly Leu Ile Leu Ser Pro Pro Gly Thr Ile Val Ser Gln Glu Glu  
370 375 380  
Asp Ile Val Thr Val Thr Asp Ala Glu Gly Arg Ala Cys Gly Trp Ala  
385 390 395 400  
Arg

&lt;210&gt; 3080

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3080

Met Gly Pro Gly Glu Ala Leu Leu Ala Gly Leu Leu Val Met Val Leu  
1 5 10 15  
Ala Val Ala Leu Leu Ser Asn Ala Leu Val Leu Leu Cys Cys Ala Tyr  
20 25 30  
Ser Ala Glu Leu Arg Thr Arg Ala Ser Gly Val Leu Leu Val Asn Leu  
35 40 45  
Ser Leu Gly His Leu Leu Leu Ala Ala Leu Asp Met Pro Phe Thr Leu  
50 55 60  
Leu Gly Val Met Arg Gly Arg Thr Pro Ser Ala Pro Gly Ala Cys Gln  
65 70 75 80  
Val Ile Gly Phe Leu Asp Thr Phe Leu Ala Ser Asn Ala Ala Leu Ser  
85 90 95  
Val Ala Ala Leu Ser Ala Asp Gln Trp Leu Ala Val Gly Phe Pro Leu  
100 105 110  
Arg Tyr Ala Gly Arg Leu Arg Pro Arg Tyr Ala Gly Leu Leu Leu Gly  
115 120 125  
Cys Ala Trp Gly Gln Ser Leu Ala Phe Ser Gly Ala Ala Leu Gly Cys  
130 135 140  
Ser Trp Leu Gly Tyr Ser Ser Ala Phe Ala Ser Cys Ser Leu Arg Leu  
145 150 155 160  
Pro Pro Glu Pro Glu Arg Pro Arg Phe Ala Ala Phe Thr Ala Thr Leu  
165 170 175  
His Ala Val Gly Phe Val Leu Pro Leu Ala Val Leu Cys Leu Thr Ser  
180 185 190  
Leu Gln Val His Arg Val Ala Arg Arg His Cys Gln Arg Met Asp Thr  
195 200 205  
Val Thr Met Lys Ala Leu Ala Leu Leu Ala Asp Leu His Pro Ser Val  
210 215 220

Arg Gln Arg Cys Leu Ile Gln Gln Lys Arg Arg Arg His Arg Ala Thr  
 225                      230                      235                      240  
 Arg Lys Ile Gly Ile Ala Ile Ala Thr Phe Leu Ile Cys Phe Ala Pro  
                          245                      250                      255  
 Tyr Val Met Thr Arg Leu Ala Glu Leu Val Pro Phe Val Thr Val Asn  
                          260                      265                      270  
 Ala Gln Trp Gly Ile Leu Ser Lys Cys Leu Thr Tyr Ser Lys Ala Val  
                          275                      280                      285  
 Ala Asp Pro Phe Thr Tyr Ser Leu Leu Arg Arg Pro Phe Arg Gln Val  
                          290                      295                      300  
 Leu Ala Gly Met Val His Arg Leu Leu Lys Arg Thr Pro Arg Pro Ala  
 305                      310                      315                      320  
 Ser Thr His Asp Ser Ser Leu Asp Val Ala Gly Met Val His Gln Leu  
                          325                      330                      335  
 Leu Lys Arg Thr Pro Arg Pro Ala Ser Thr His Asn Gly Ser Val Asp  
                          340                      345                      350  
 Thr Glu Asn Asp Ser Cys Leu Gln Gln Thr His  
                          355                      360

<210> 3081

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3081

Met Thr Asn Glu Glu Pro Leu Pro Lys Lys Val Arg Leu Ser Glu Thr  
                          1                      5                      10                      15  
 Asp Phe Lys Val Met Ala Arg Asp Glu Leu Ile Leu Arg Trp Lys Gln

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Asn Asn Gln Asp Pro Leu Leu His Cys Leu Gln Glu Thr His Leu Thr  
                   35                                  40                                  45  
 Cys Lys Asp Thr Tyr Arg Leu Lys Ile Lys Arg Trp Arg Lys Ile Tyr  
                   50                                  55                                  60  
 Gln Ala Asn Gly Lys Trp Lys Lys Ala Gly Val Ala Ile Leu Val Ser  
                   65                                  70                                  75                                  80  
 Asp Lys Thr Asp Leu Lys Pro Thr Lys Ile Lys Lys Thr Lys Lys Gly  
                                   85                                  90                                  95  
 Ile Thr Gln Trp  
                                   100

<210> 3083

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3083

Met Lys Met Ile Asp Lys Tyr Ala Ser Glu Asp Ala Glu Leu Leu Leu  
           1                                  5                                  10                                  15  
 Val Gly Asn Lys Leu Asp Cys Glu Thr Asp Arg Glu Ile Thr Arg Gln  
                                   20                                  25                                  30  
 Gln Gly Glu Lys Phe Ala Gln Gln Ile Thr Gly Met Arg Phe Cys Glu  
                   35                                  40                                  45  
 Ala Ser Ala Lys Asp Asn Phe Asn Val Asp Glu Ile Phe Leu Lys Leu  
                   50                                  55                                  60  
 Val Asp Asp Ile Leu Lys Lys Met Pro Leu Asp Ile Leu Arg Asn Glu  
                   65                                  70                                  75                                  80  
 Leu Ser Asn Ser Ile Leu Ser Leu Gln Pro Glu Pro Glu Ile Pro Pro

85 90 95  
 Glu Leu Pro Pro Pro Arg Pro His Val Arg Cys Cys  
 100 105

<210> 3084

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3084

Met Leu Asn Pro Ser Val Leu Gly Arg Lys His Ser Pro His Gln Gly  
 1 5 10 15  
 Leu Arg Leu Ser Gly Ile Ser Asn Val Cys Ser Leu Leu Gly Val Ser  
 20 25 30  
 Gln Gly Pro Glu His His Lys Leu Leu Leu His Leu Gln Leu Leu Ile  
 35 40 45  
 Leu Cys Thr Asn Cys Arg Met Ala Leu Tyr Met Leu Leu Gly Gln Glu  
 50 55 60  
 Val Arg Arg Pro Glu Thr Ser Tyr His Ala Thr Lys Cys Thr Gln Ala  
 65 70 75 80  
 Lys Ser Asp Val Asn Arg Ser Ser Val Asp Ala Asn Arg Ser Ser Ile  
 85 90 95  
 Trp Ile His Ile Asp Lys Pro Pro Arg Val Leu Arg Trp Gly Cys Val  
 100 105 110  
 Cys Met Ser Ile Tyr Thr Trp Met Trp Leu His Met Trp Val Cys Ala  
 115 120 125  
 Cys Thr Tyr Val Cys Ser His Val Cys Met Cys Gly Cys Val Cys Met  
 130 135 140

Cys Met Cys Leu Tyr Val Tyr Met Cys Met Cys Val Cys Val Arg Val  
 145                      150                      155                      160  
 His Val Arg Ser Arg Glu Glu Gln Leu Lys Ala Gly Val Val Trp Ser  
                          165                      170                      175  
 Gly Thr Glu Asp Gln Val Arg Val Glu Glu Thr Leu Pro Leu Tyr Ser  
                          180                      185                      190  
 Pro Leu Pro Thr Gln Ala Arg Leu Ser Ser Val Ser Gly Val Ser  
                          195                      200                      205

<210> 3085

<211> 1204

<212> PRT

<213> Homo sapiens

<400> 3085

Met Tyr Val Thr Met Met Met Thr Asp Gln Ile Pro Leu Glu Leu Pro  
 1                      5                      10                      15  
 Pro Leu Leu Asn Gly Glu Val Ala Met Met Pro His Leu Val Asn Gly  
                          20                      25                      30  
 Asp Ala Ala Gln Gln Val Ile Leu Val Gln Val Asn Pro Gly Glu Thr  
                          35                      40                      45  
 Phe Thr Ile Arg Ala Glu Asp Gly Thr Leu Gln Cys Ile Gln Gly Pro  
                          50                      55                      60  
 Ala Glu Val Pro Met Met Ser Pro Asn Gly Ser Ile Pro Pro Ile His  
 65                      70                      75                      80  
 Val Pro Pro Gly Tyr Ile Ser Gln Val Ile Glu Asp Ser Thr Gly Val  
                          85                      90                      95  
 Arg Arg Val Val Val Thr Pro Gln Ser Pro Glu Cys Tyr Pro Pro Ser



100	105	110
Tyr Pro Ser Ala Met Ser Pro Thr His His Leu Pro Pro Tyr Leu Thr		
115	120	125
His His Pro His Phe Ile His Asn Ser His Thr Ala Tyr Tyr Pro Pro		
130	135	140
Val Thr Gly Pro Gly Asp Met Pro Pro Gln Phe Phe Pro Gln His His		
145	150	155
160		
Leu Pro His Thr Ile Tyr Gly Glu Gln Glu Ile Ile Pro Phe Tyr Gly		
165	170	175
Met Ser Ser Tyr Ile Thr Arg Glu Asp Gln Tyr Ser Lys Pro Pro His		
180	185	190
Lys Lys Leu Lys Asp Arg Gln Ile Asp Arg Gln Asn Arg Leu Asn Ser		
195	200	205
Pro Pro Ser Ser Ile Tyr Lys Ser Ser Cys Thr Thr Val Tyr Asn Gly		
210	215	220
Tyr Gly Lys Gly His Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Ser		
225	230	235
240		
Gly Pro Gly Ile Lys Lys Thr Glu Arg Arg Ala Arg Ser Ser Pro Lys		
245	250	255
Ser Asn Asp Ser Asp Leu Gln Glu Tyr Glu Leu Glu Val Lys Arg Val		
260	265	270
Gln Asp Ile Leu Ser Gly Ile Glu Lys Pro Gln Val Ser Asn Ile Gln		
275	280	285
Ala Arg Ala Val Val Leu Ser Trp Ala Pro Pro Val Gly Leu Ser Cys		
290	295	300
Gly Pro His Ser Gly Leu Ser Phe Pro Tyr Ser Tyr Glu Val Ala Leu		
305	310	315
320		
Ser Asp Lys Gly Arg Asp Gly Lys Tyr Lys Ile Ile Tyr Ser Gly Glu		
325	330	335

Glu Leu Glu Cys Asn Leu Lys Asp Leu Arg Pro Ala Thr Asp Tyr His  
340 345 350  
Val Arg Val Tyr Ala Met Tyr Asn Ser Val Lys Gly Ser Cys Ser Glu  
355 360 365  
Pro Val Ser Phe Thr Thr His Ser Cys Ala Pro Glu Cys Pro Phe Pro  
370 375 380  
Pro Lys Leu Ala His Arg Ser Lys Ser Ser Leu Thr Leu Gln Trp Lys  
385 390 395 400  
Ala Pro Ile Asp Asn Gly Ser Lys Ile Thr Asn Tyr Leu Leu Glu Trp  
405 410 415  
Asp Glu Gly Lys Arg Asn Ser Gly Phe Arg Gln Cys Phe Phe Gly Ser  
420 425 430  
Gln Lys His Cys Lys Leu Thr Lys Leu Cys Pro Ala Met Gly Tyr Thr  
435 440 445  
Phe Arg Leu Ala Ala Arg Asn Asp Ile Gly Thr Ser Gly Tyr Ser Gln  
450 455 460  
Glu Val Val Cys Tyr Thr Leu Gly Asn Ile Pro Gln Met Pro Ser Ala  
465 470 475 480  
Pro Arg Leu Val Arg Ala Gly Ile Thr Trp Val Thr Leu Gln Trp Ser  
485 490 495  
Lys Pro Glu Gly Cys Ser Pro Glu Glu Val Ile Thr Tyr Thr Leu Glu  
500 505 510  
Ile Gln Glu Asp Glu Asn Asp Asn Leu Phe His Pro Lys Tyr Thr Gly  
515 520 525  
Glu Asp Leu Thr Cys Thr Val Lys Asn Leu Lys Arg Ser Thr Gln Tyr  
530 535 540  
Lys Phe Arg Leu Thr Ala Ser Asn Thr Glu Gly Lys Ser Cys Pro Ser  
545 550 555 560  
Glu Val Leu Val Cys Thr Thr Ser Pro Asp Arg Pro Gly Pro Pro Thr

565	570	575
Arg Pro Leu Val Lys Gly Pro Val Thr Ser His Gly Phe Ser Val Lys		
580	585	590
Trp Asp Pro Pro Lys Asp Asn Gly Gly Ser Glu Ile Leu Lys Tyr Leu		
595	600	605
Leu Glu Ile Thr Asp Gly Asn Ser Glu Ala Asn Gln Trp Glu Val Ala		
610	615	620
Tyr Ser Gly Ser Ala Thr Glu Tyr Thr Phe Thr His Leu Lys Pro Gly		
625	630	635
640		
Thr Leu Tyr Lys Leu Arg Ala Cys Cys Ile Ser Thr Gly Gly His Ser		
645	650	655
Gln Cys Ser Glu Ser Leu Pro Val Arg Thr Leu Ser Ile Ala Pro Gly		
660	665	670
Gln Cys Arg Pro Pro Arg Val Leu Gly Arg Pro Lys His Lys Glu Val		
675	680	685
His Leu Glu Trp Asp Val Pro Ala Ser Glu Ser Gly Cys Glu Val Ser		
690	695	700
Glu Tyr Ser Val Glu Met Thr Glu Pro Glu Asp Val Ala Ser Glu Val		
705	710	715
720		
Tyr His Gly Pro Glu Leu Glu Cys Thr Val Gly Asn Leu Leu Pro Gly		
725	730	735
Thr Val Tyr Arg Phe Arg Val Arg Ala Leu Asn Asp Gly Gly Tyr Gly		
740	745	750
Pro Tyr Ser Asp Val Ser Glu Ile Thr Thr Ala Ala Gly Pro Pro Gly		
755	760	765
Gln Cys Lys Ala Pro Cys Ile Ser Cys Thr Pro Asp Gly Cys Val Leu		
770	775	780
Val Gly Trp Glu Ser Pro Asp Ser Ser Gly Ala Asp Ile Ser Glu Tyr		
785	790	795
800		

Arg Leu Glu Trp Gly Glu Asp Glu Glu Ser Leu Glu Leu Ile Tyr His  
805 810 815

Gly Thr Asp Thr Arg Phe Glu Ile Arg Asp Leu Leu Pro Ala Ala Gln  
820 825 830

Tyr Cys Cys Arg Leu Gln Ala Phe Asn Gln Ala Gly Ala Gly Pro Tyr  
835 840 845

Ser Glu Leu Val Leu Cys Gln Thr Pro Ala Ser Ala Pro Asp Pro Val  
850 855 860

Ser Thr Leu Cys Val Leu Glu Glu Glu Pro Leu Asp Ala Tyr Pro Asp  
865 870 875 880

Ser Pro Ser Ala Cys Leu Val Leu Asn Trp Glu Glu Pro Cys Asn Asn  
885 890 895

Gly Ser Glu Ile Leu Ala Tyr Thr Ile Asp Leu Gly Asp Thr Ser Ile  
900 905 910

Thr Val Gly Asn Thr Thr Met His Val Met Lys Asp Leu Leu Pro Glu  
915 920 925

Thr Thr Tyr Arg Ile Arg Ile Gln Ala Ile Asn Glu Ile Gly Ala Gly  
930 935 940

Pro Phe Ser Gln Phe Ile Lys Ala Lys Thr Arg Pro Leu Pro Pro Leu  
945 950 955 960

Pro Pro Arg Leu Glu Cys Ala Ala Ala Gly Pro Gln Ser Leu Lys Leu  
965 970 975

Lys Trp Gly Asp Ser Asn Ser Lys Thr His Ala Ala Glu Asp Ile Val  
980 985 990

Tyr Thr Leu Gln Leu Glu Asp Arg Asn Lys Arg Phe Ile Ser Ile Tyr  
995 1000 1005

Arg Gly Pro Ser His Thr Tyr Lys Val Gln Arg Leu Thr Glu Phe Thr  
1010 1015 1020

Cys Tyr Ser Phe Arg Ile Gln Ala Ala Ser Glu Ala Gly Glu Gly Pro

1025                      1030                      1035                      1040  
Phe Ser Glu Thr Tyr Thr Phe Ser Thr Thr Lys Ser Val Pro Pro Thr  
                         1045                      1050                      1055  
Ile Lys Ala Pro Arg Val Thr Gln Leu Glu Gly Asn Ser Cys Glu Ile  
                         1060                      1065                      1070  
Leu Trp Glu Thr Val Pro Ser Met Lys Gly Asp Pro Val Asn Tyr Ile  
                         1075                      1080                      1085  
Leu Gln Val Leu Val Gly Arg Glu Ser Glu Tyr Lys Gln Val Tyr Lys  
                         1090                      1095                      1100  
Gly Glu Glu Ala Thr Phe Gln Ile Ser Gly Leu Gln Thr Asn Thr Asp  
1105                      1110                      1115                      1120  
Tyr Arg Phe Arg Val Cys Ala Cys Arg Arg Cys Leu Asp Thr Ser Gln  
                         1125                      1130                      1135  
Glu Leu Ser Gly Ala Phe Ser Pro Ser Ala Ala Phe Val Leu Gln Arg  
                         1140                      1145                      1150  
Ser Glu Val Met Leu Thr Gly Asp Met Gly Ser Leu Asp Asp Pro Lys  
                         1155                      1160                      1165  
Met Lys Ser Met Met Pro Thr Asp Glu Gln Phe Ala Ala Ile Ile Val  
                         1170                      1175                      1180  
Leu Gly Phe Ala Thr Leu Ser Ile Leu Phe Ala Phe Ile Leu Gln Tyr  
1185                      1190                      1195                      1200  
Phe Leu Met Lys

&lt;210&gt; 3086

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3086

Met Gly Glu Gly Asp Ser Arg Arg Glu Pro Val Val Gly Leu Pro Gln

1 5 10 15

Leu Arg Trp Ala His Thr Ala Arg Val Ser Trp Asp Asp Pro Gly Glu

20 25 30

Leu Gly Gly Pro Ser Trp Trp Glu Ser Leu Ala Val Ile Leu Phe Ile

35 40 45

Val Leu Arg Asp Gly Ala Pro Gly Ser Arg Gly Thr Arg Tyr Cys Ser

50 55 60

Ala Ser Phe Ile Phe Ile Tyr Phe Phe Phe Phe Glu Met Gly Ser Gly

65 70 75 80

Ser Val Thr Gln Asp Gly Val Gln Trp Leu Asp Leu Cys Ser Leu Gln

85 90 95

Pro Pro Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser

100 105 110

Ser Trp Asp Tyr Arg Arg Val Pro Pro His Pro Ala Asn Phe Val Cys

115 120 125

Phe

&lt;210&gt; 3087

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3087

Met Glu Thr His His Gly Ile Cys Ser Arg Leu Cys Lys Glu Ser Asp

1	5	10	15
Ser Val Val Leu Ala Val Gly Tyr Arg Lys Leu Pro Lys His Lys Phe			
20	25	30	
Pro Val Pro Val Arg Asp Cys Leu Val Ala Thr Ile His Phe Leu Lys			
35	40	45	
Ser Leu Asp Ala Tyr Gly Val Asp Pro Ala Arg Val Val Val Cys Gly			
50	55	60	
Asp Ser Phe Gly Gly Ala Ile Ala Ala Val Val Cys Gln Gln Leu Val			
65	70	75	80
Asp Arg Pro Asp Leu Pro Arg Ile Arg Ala Gln Ile Leu Ile Tyr Ala			
85	90	95	
Ile Leu Gln Ala Leu Asp Leu Gln Thr Pro Ser Phe Gln Gln Arg Lys			
100	105	110	
Asn Ile Pro Leu Leu Thr Trp Ser Phe Ile Cys Tyr Phe Phe Phe Gln			
115	120	125	
Asn Leu Asp Phe Ser Ser Ser Trp Gln Glu Val Ile Met Lys Gly Ala			
130	135	140	
His Leu Pro Ala Glu Val Trp Glu Lys Tyr Arg Lys Trp Leu Gly Pro			
145	150	155	160
Glu Asn Ile Pro Glu Arg Phe Lys Glu Arg Gly Tyr Gln Leu Lys Pro			
165	170	175	
His Glu Pro Met Asn Glu Ala Ala Tyr Leu Glu Val Ser Val Val Leu			
180	185	190	
Asp Val Met Cys Ser Pro Leu Ile Ala Glu Asp Asp Ile Val Ser Gln			
195	200	205	
Leu Pro Glu Thr Cys Ile Val Ser Cys Glu Tyr Asp Ala Leu Arg Asp			
210	215	220	
Asn Ser Leu Leu Tyr Lys Lys Arg Leu Glu Asp Leu Gly Val Pro Val			
225	230	235	240

出証特 2 0 0 4 - 3 0 5 9 6 6 1



115	120	125
Val Arg Val Trp Phe Lys Asn Arg Arg Ala Lys Trp Arg Lys Arg Glu		
130	135	140
Arg Asn Gln Gln Ala Glu Leu Cys Lys Asn Gly Phe Gly Pro Gln Phe		
145	150	155
Asn Gly Leu Met Gln Pro Tyr Asp Asp Met Tyr Pro Gly Tyr Ser Tyr		
165	170	175
Asn Asn Trp Ala Ala Lys Gly Leu Thr Ser Ala Ser Leu Ser Thr Lys		
180	185	190
Ser Phe Pro Phe Phe Asn Ser Met Asn Val Asn Pro Leu Ser Ser Gln		
195	200	205
Ser Met Phe Ser Pro Pro Asn Ser Ile Ser Ser Met Ser Met Ser Ser		
210	215	220
Ser Met Val Pro Ser Ala Val Thr Gly Val Pro Gly Ser Ser Leu Asn		
225	230	235
Ser Leu Asn Asn Leu Asn Asn Leu Ser Ser Pro Ser Leu Asn Ser Ala		
245	250	255
Val Pro Thr Pro Ala Cys Pro Tyr Ala Pro Pro Thr Pro Pro Tyr Val		
260	265	270
Tyr Arg Asp Thr Cys Asn Ser Ser Leu Ala Ser Leu Arg Leu Lys Ala		
275	280	285
Lys Gln His Ser Ser Phe Gly Tyr Ala Ser Val Gln Asn Pro Ala Ser		
290	295	300
Asn Leu Ser Ala Cys Gln Tyr Ala Val Asp Arg Pro Val		
305	310	315

&lt;210&gt; 3089

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3089

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Met Trp Lys Val Glu Arg Glu His Met Gly Ser Gly Ala Ser Gly Leu
  1             5             10             15
Leu Gly Ser Val Leu Pro Val Trp Glu Leu Ser Pro Ala Leu Pro Cys
          20             25             30
Ser Val Ser Val Ser Leu Arg Ser Val Pro Pro Ser Val Leu Gln Phe
          35             40             45
Phe Pro Leu His Leu Ser Leu Trp Leu Ser Gln Ser Leu Phe Ala Pro
          50             55             60
His Cys Leu Cys Leu Ser Leu His Leu Ser Ser Phe Pro Gly Leu Ser
          65             70             75             80
Leu Ser Leu Ser Ser Leu Phe Trp Ala Phe Ser Val Ser Val Ser Leu
          85             90             95
Phe Phe Ser Leu Leu Leu Ser Val Ser Val His Phe Ser Val Cys Leu
          100            105            110
Cys Pro Leu His Ser His Ser Pro Pro Met Leu Ser Ser Leu Gly Ala
          115            120            125
Pro Leu Ala Ser Leu Gly His Arg Pro Arg Leu Gly Cys Glu Glu Ala
          130            135            140
Gly Ala Pro Pro Ser Asp Asp Thr Arg Cys Pro Ser Gln Gly Ser Gly
          145            150            155            160
Gly Gln Thr Lys Ser Ser Ala Arg Gly Gly Lys Ile Leu Phe Pro Gly
          165            170            175
Lys Gly Met Trp Gly Leu Leu Ala Ser Cys Gly Met Gly Gly
          180            185            190

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&lt;210&gt; 3090

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3090

Met Gly Pro Ser Cys Ser Ala Ala Ala Gly Gly Leu Trp Val Pro Pro

1 5 10 15

Ala Thr Glu Val Ala Ser Lys Gly Arg Val Pro Pro Arg Pro Lys Pro

20 25 30

Arg Ser Gly Val Ala Val Leu Gln Gly Arg Val Asp Ala Glu Pro Cys

35 40 45

Pro Pro Pro Pro Ala Thr Pro Ser Val Ser Gly Leu Gln Val Ala Gly

50 55 60

Ser Pro Trp Thr Ala Gly Gly Arg Gly Arg Ala Arg Ala Pro Pro Asp

65 70 75 80

Leu Arg Ser Ala His Leu Gly Ile Ala Ala Leu Cys Lys Ala Cys Asp

85 90 95

Gly Arg Lys Gly Gly Tyr Ile Ser Pro Ala Ser Ala Arg Gly Ser Cys

100 105 110

Met Arg Gly Ala Gly Gly Ser Cys Met Gly Gly Arg Lys Ser Ser Thr

115 120 125

Ser Arg Glu Gly Gly Asp Arg Ala Trp Val Glu Glu Asn His Ala Ser

130 135 140

Leu Gly Gly Trp Cys Met Arg Gly His Leu Leu Arg Thr Gly Gly Arg

145 150 155 160

Ala Leu Gln Val Gly Trp Pro Pro Pro Cys Val Thr Gly Ala Gln Cys

165 170 175

Trp Ala Gln Ala Gly Ala Val Pro Ala Arg Ala

180

185

<210> 3091

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3091

Met Ala Arg Thr Val Val Leu Ile Thr Gly Cys Ser Ser Gly Ile Gly

1

5

10

15

Leu His Leu Ala Val Arg Leu Ala Ser Asp Pro Ser Gln Ser Phe Lys

20

25

30

Val Tyr Ala Thr Leu Arg Asp Leu Lys Thr Gln Gly Arg Leu Trp Glu

35

40

45

Ala Ala Arg Ala Leu Ala Cys Pro Pro Gly Ser Leu Glu Thr Leu Gln

50

55

60

Leu Asp Val Arg Asp Ser Lys Ser Val Ala Ala Ala Arg Glu Arg Val

65

70

75

80

Thr Glu Gly Arg Val Asp Val Leu Val Cys Asn Ala Gly Leu Gly Leu

85

90

95

Leu Gly Pro Leu Glu Ala Leu Gly Glu Asp Ala Val Ala Ser Val Leu

100

105

110

Asp Val Asn Val Val Gly Thr Val Arg Met Leu Gln Ala Phe Leu Pro

115

120

125

Asp Met Lys Arg Arg Gly Ser Gly Arg Val Leu Val Thr Gly Ser Val

130

135

140

Gly Gly Leu Met Gly Leu Pro Phe Asn Asp Val Tyr Cys Ala Ser Lys

145                      150                      155                      160  
Phe Ala Leu Glu Gly Leu Cys Glu Ser Leu Ala Val Leu Leu Leu Pro  
                         165                      170                      175  
Phe Gly Val His Leu Ser Leu Ile Glu Cys Gly Pro Val His Thr Ala  
                         180                      185                      190  
Phe Met Glu Lys Val Leu Gly Ser Pro Glu Glu Val Leu Asp Arg Thr  
                         195                      200                      205  
Asp Ile His Thr Phe His Arg Phe Tyr Gln Tyr Leu Ala His Ser Lys  
                         210                      215                      220  
Gln Val Phe Arg Glu Ala Ala Gln Asn Pro Glu Glu Val Ala Glu Val  
225                      230                      235                      240  
Phe Leu Thr Ala Leu Arg Ala Pro Lys Pro Thr Leu Arg Tyr Phe Thr  
                         245                      250                      255  
Thr Glu Arg Phe Leu Pro Leu Leu Arg Met Arg Leu Asp Asp Pro Ser  
                         260                      265                      270  
Gly Ser Asn Tyr Val Thr Ala Met His Arg Glu Val Phe Gly Asp Val  
                         275                      280                      285  
Pro Ala Lys Ala Glu Ala Gly Ala Glu Ala Gly Gly Gly Ala Gly Pro  
                         290                      295                      300  
Gly Ala Glu Asp Glu Ala Gly Arg Ser Ala Val Gly Asp Pro Glu Leu  
305                      310                      315                      320  
Gly Asp Pro Pro Ala Ala Pro Gln  
                         325

&lt;210&gt; 3092

&lt;211&gt; 847

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3092

Met Gln Glu Thr Gly Thr Arg Ile Asn Ile Pro Pro Pro Ser Val Asn  
 1 5 10 15  
 Arg Thr Glu Ile Val Phe Thr Gly Glu Lys Glu Gln Leu Ala Gln Ala  
 20 25 30  
 Val Ala Arg Ile Lys Lys Ile Tyr Glu Glu Lys Ala Asn Ser Phe Thr  
 35 40 45  
 Val Ser Ser Val Ala Ala Pro Ser Trp Leu His Arg Phe Ile Ile Gly  
 50 55 60  
 Lys Lys Gly Gln Asn Leu Ala Lys Ile Thr Gln Gln Met Pro Lys Val  
 65 70 75 80  
 His Ile Glu Phe Thr Glu Gly Glu Asp Lys Ile Thr Leu Glu Gly Pro  
 85 90 95  
 Thr Glu Asp Val Asn Val Ala Gln Glu Gln Ile Glu Gly Met Val Lys  
 100 105 110  
 Asp Leu Ile Asn Arg Met Asp Tyr Val Glu Ile Asn Ile Asp His Lys  
 115 120 125  
 Phe His Arg His Leu Ile Gly Lys Ser Gly Ala Asn Ile Asn Arg Ile  
 130 135 140  
 Lys Asp Gln Tyr Lys Val Ser Val Arg Ile Pro Pro Asp Ser Glu Lys  
 145 150 155 160  
 Ser Asn Leu Ile Arg Ile Glu Gly Asp Pro Gln Gly Val Gln Gln Ala  
 165 170 175  
 Lys Arg Glu Leu Leu Glu Leu Ala Ser Arg Leu Glu Asn Glu Arg Thr  
 180 185 190  
 Lys Asp Leu Ile Ile Glu Gln Arg Phe His Arg Thr Ile Ile Gly Gln  
 195 200 205  
 Lys Gly Glu Arg Ile Arg Glu Ile Arg Asp Lys Phe Pro Glu Val Ile

210	215	220	
Ile Asn Phe Pro Asp Pro Ala Gln Lys Ser Asp Ile Val Gln Leu Arg			
225	230	235	240
Gly Pro Lys Asn Glu Val Glu Lys Cys Thr Lys Tyr Met Gln Lys Met			
245	250	255	
Val Ala Asp Leu Val Glu Asn Ser Tyr Ser Ile Ser Val Pro Ile Phe			
260	265	270	
Lys Gln Phe His Lys Asn Ile Ile Gly Lys Gly Gly Ala Asn Ile Lys			
275	280	285	
Lys Ile Arg Glu Glu Ser Asn Thr Lys Ile Asp Leu Pro Ala Glu Asn			
290	295	300	
Ser Asn Ser Glu Thr Ile Ile Ile Thr Gly Lys Arg Ala Asn Cys Glu			
305	310	315	320
Ala Ala Arg Ser Arg Ile Leu Ser Ile Gln Lys Asp Leu Ala Asn Ile			
325	330	335	
Ala Glu Val Glu Val Ser Ile Pro Ala Lys Leu His Asn Ser Leu Ile			
340	345	350	
Gly Thr Lys Gly Arg Leu Ile Arg Ser Ile Met Glu Glu Cys Gly Gly			
355	360	365	
Val His Ile His Phe Pro Val Glu Gly Ser Gly Ser Asp Thr Val Val			
370	375	380	
Ile Arg Gly Pro Ser Ser Asp Val Glu Lys Ala Lys Lys Gln Leu Leu			
385	390	395	400
His Leu Ala Glu Glu Lys Gln Thr Lys Ser Phe Thr Val Asp Ile Arg			
405	410	415	
Ala Lys Pro Glu Tyr His Lys Phe Leu Ile Gly Lys Gly Gly Gly Lys			
420	425	430	
Ile Arg Lys Val Arg Asp Ser Thr Gly Ala Arg Val Ile Phe Pro Ala			
435	440	445	

Ala Glu Asp Lys Asp Gln Asp Leu Ile Thr Ile Ile Gly Lys Glu Asp  
 450 455 460  
 Ala Val Arg Glu Ala Gln Lys Glu Leu Glu Ala Leu Ile Gln Asn Leu  
 465 470 475 480  
 Asp Asn Val Val Glu Asp Ser Met Leu Val Asp Pro Lys His His Arg  
 485 490 495  
 His Phe Val Ile Arg Arg Gly Gln Val Leu Arg Glu Ile Ala Glu Glu  
 500 505 510  
 Tyr Gly Gly Val Met Val Ser Phe Pro Arg Ser Gly Thr Gln Ser Asp  
 515 520 525  
 Lys Val Thr Leu Lys Gly Ala Lys Asp Cys Val Glu Ala Ala Lys Lys  
 530 535 540  
 Arg Ile Gln Glu Ile Ile Glu Asp Leu Glu Ala Gln Val Thr Leu Glu  
 545 550 555 560  
 Cys Ala Ile Pro Gln Lys Phe His Arg Ser Val Met Gly Pro Lys Gly  
 565 570 575  
 Ser Arg Ile Gln Gln Ile Thr Arg Asp Phe Ser Val Gln Ile Lys Phe  
 580 585 590  
 Pro Asp Arg Glu Glu Asn Ala Val His Ser Thr Glu Pro Val Val Gln  
 595 600 605  
 Glu Asn Gly Asp Glu Ala Gly Glu Gly Arg Glu Ala Lys Asp Cys Asp  
 610 615 620  
 Pro Gly Ser Pro Arg Arg Cys Asp Ile Ile Ile Ile Ser Gly Arg Lys  
 625 630 635 640  
 Glu Lys Cys Glu Ala Ala Lys Glu Ala Leu Glu Ala Leu Val Pro Val  
 645 650 655  
 Thr Ile Glu Val Glu Val Pro Phe Asp Leu His Arg Tyr Val Ile Gly  
 660 665 670  
 Gln Lys Gly Ser Gly Ile Arg Lys Met Met Asp Glu Phe Glu Val Asn



675 680 685  
Ile His Val Pro Ala Pro Glu Leu Gln Ser Asp Ile Ile Ala Ile Thr  
690 695 700  
Gly Leu Ala Ala Asn Leu Asp Arg Ala Lys Ala Gly Leu Leu Glu Arg  
705 710 715 720  
Val Lys Glu Leu Gln Ala Glu Gln Glu Asp Arg Ala Leu Arg Ser Phe  
725 730 735  
Lys Leu Ser Val Thr Val Asp Pro Lys Tyr His Pro Lys Ile Ile Gly  
740 745 750  
Arg Lys Gly Ala Val Ile Thr Gln Ile Arg Leu Glu His Asp Val Asn  
755 760 765  
Ile Leu Asn Leu Glu Glu Glu Tyr Leu Ala Asp Val Val Asp Ser Glu  
770 775 780  
Ala Leu Gln Val Tyr Met Lys Pro Pro Ala His Glu Glu Ala Lys Ala  
785 790 795 800  
Pro Ser Arg Gly Phe Val Val Arg Asp Ala Pro Trp Thr Ala Ser Ser  
805 810 815  
Ser Glu Lys Ala Pro Asp Met Ser Ser Ser Glu Glu Phe Pro Ser Phe  
820 825 830  
Gly Ala Gln Val Ala Pro Lys Thr Leu Pro Trp Gly Pro Lys Arg  
835 840 845

&lt;210&gt; 3093

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3093

Met Leu Gln Leu Ala Gly Val Ser Asn Ser Thr Cys Gly Gly Val Arg  
 1 5 10 15  
 Asn Val Ser Val Glu Thr Arg Asn Val Lys Pro Gln Gly Lys Asp Ser  
 20 25 30  
 Lys Ala Glu Glu Asn Gly Ser His Ser Phe Met His Ser Met Asp Pro  
 35 40 45  
 Gln Leu Glu Arg Gln Met Glu Thr Thr Gln Asn Leu Val Asp Ser Tyr  
 50 55 60  
 Met Ala Ile Val Asn Lys Thr Val Trp Asp Leu Met Val Gly Ala Lys  
 65 70 75 80  
 Pro Lys Thr Thr Met His Ile Met Ile Tyr Asn Val His Ala Pro Pro  
 85 90 95  
 His Gly Asp Gln Gly Val His Leu Leu Gly Ala Ala Val Gln Pro Ala  
 100 105 110  
 Leu Ala Trp Glu Arg Glu Asp Thr His Gly Gly Val Gly Arg Val Gly  
 115 120 125  
 Thr Ala Ala Arg Arg Asp Ala Ala Ser Gln Ser Cys Cys Pro Thr Cys  
 130 135 140  
 Thr Arg Leu Gly Thr Arg Arg His Ser Trp Arg Ser Arg Gln Ser Arg  
 145 150 155 160  
 His Ser Gly Ala Thr Arg Leu Ala Trp Glu Glu Ile Asp Thr Pro Gly  
 165 170 175  
 Gly Val Gly Arg Ala Gly Thr Ala Ala Arg Arg Asp Ser Arg Gly Asn  
 180 185 190  
 Glu Lys Thr Leu Leu Glu Glu Ser Ala Glu Gln Ala Asp Gln Gly Val  
 195 200 205  
 His Leu Leu Gly Ala Ala Val Gln Pro Ala Leu Ala  
 210 215 220

&lt;210&gt; 3094

&lt;211&gt; 1345

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3094

Met Leu Tyr Asn Gln Pro Asp Gln Lys Tyr Asp Glu Glu Asn Leu Pro

1 5 10 15

Ile Pro Asn Ser Leu Arg Cys Glu Leu Leu Leu Val Leu Lys Thr Gln

20 25 30

Trp Pro Phe Asp Pro Glu Phe Trp Asp Trp Lys Thr Leu Lys Arg Gln

35 40 45

Cys Leu Ala Leu Met Gly Glu Glu Ala Ser Ile Val Ser Ser Ile Asp

50 55 60

Glu Leu Asn Asp Ser Glu Val Tyr Glu Lys Val Val Asp Tyr Gln Glu

65 70 75 80

Glu Ser Lys Glu Thr Ser Met Asn Gly Leu Ser Gly Gly Val Gly Ala

85 90 95

Asn Ser Gly Leu Leu Lys Asp Ile Gly Asp Glu Lys Gln Lys Lys Arg

100 105 110

Glu Ile Lys Gln Leu Arg Glu Arg Gly Phe Ile Ser Ala Arg Phe Arg

115 120 125

Asn Trp Gln Ala Tyr Met Gln Tyr Cys Val Leu Cys Asp Lys Glu Phe

130 135 140

Leu Gly His Arg Ile Val Arg His Ala Gln Lys His Tyr Lys Asp Gly

145 150 155 160

Ile Tyr Ser Cys Pro Ile Cys Ala Lys Asn Phe Asn Ser Lys Glu Thr

165 170 175

Phe Val Pro His Val Thr Leu His Val Lys Gln Ser Ser Lys Glu Arg  
 180 185 190  
 Leu Ala Ala Met Lys Pro Leu Arg Arg Leu Gly Arg Pro Pro Lys Ile  
 195 200 205  
 Thr Thr Thr Asn Glu Asn Gln Lys Thr Asn Thr Val Ala Lys Gln Glu  
 210 215 220  
 Gln Arg Pro Ile Lys Lys Asn Ser Leu Tyr Ser Thr Asp Phe Ile Val  
 225 230 235 240  
 Phe Asn Asp Asn Asp Gly Ser Asp Asp Glu Asn Asp Asp Lys Asp Lys  
 245 250 255  
 Ser Tyr Glu Pro Glu Val Ile Pro Val Gln Lys Pro Val Pro Val Asn  
 260 265 270  
 Glu Phe Asn Cys Pro Val Thr Phe Cys Lys Lys Gly Phe Lys Tyr Phe  
 275 280 285  
 Lys Asn Leu Ile Ala His Val Lys Gly His Lys Asp Asn Glu Asp Ala  
 290 295 300  
 Lys Arg Phe Leu Glu Met Gln Ser Lys Lys Val Ile Cys Gln Tyr Cys  
 305 310 315 320  
 Arg Arg His Phe Val Ser Val Thr His Leu Asn Asp His Leu Gln Met  
 325 330 335  
 His Cys Gly Ser Lys Pro Tyr Ile Cys Ile Gln Met Lys Cys Lys Ala  
 340 345 350  
 Gly Phe Asn Ser Tyr Ala Glu Leu Leu Thr His Arg Lys Glu His Gln  
 355 360 365  
 Val Phe Arg Ala Lys Cys Met Phe Pro Lys Cys Gly Arg Ile Phe Ser  
 370 375 380  
 Glu Ala Tyr Leu Leu Tyr Asp His Glu Ala Gln His Tyr Asn Thr Tyr  
 385 390 395 400  
 Thr Cys Lys Phe Thr Gly Cys Gly Lys Val Tyr Arg Ser Gln Gly Glu

405	410	415
Leu Glu Lys His Leu Asp Asp His Ser Thr Pro Pro Glu Lys Val Leu		
420	425	430
Pro Pro Glu Ala Gln Leu Asn Ser Ser Gly Asp Ser Ile Gln Pro Ser		
435	440	445
Glu Val Asn Gln Asn Thr Ala Glu Asn Ile Glu Lys Glu Arg Ser Met		
450	455	460
Leu Pro Ser Glu Asn Asn Ile Glu Asn Ser Leu Leu Ala Asp Arg Ser		
465	470	475
Asp Ala Trp Asp Lys Ser Lys Ala Glu Ser Ala Val Thr Lys Gln Asp		
485	490	495
Gln Ile Ser Ala Ser Glu Leu Arg Gln Ala Asn Gly Pro Leu Ser Asn		
500	505	510
Gly Leu Glu Asn Pro Ala Thr Thr Pro Leu Leu Gln Ser Ser Glu Val		
515	520	525
Ala Val Ser Ile Lys Val Ser Leu Asn Gln Gly Ile Glu Asp Asn Phe		
530	535	540
Gly Lys Gln Glu Asn Ser Thr Val Glu Gly Ser Gly Glu Ala Leu Val		
545	550	555
Thr Asp Leu His Thr Pro Val Glu Asp Thr Cys Asn Asp Leu Cys His		
565	570	575
Pro Gly Phe Gln Glu Arg Lys Glu Gln Asp Cys Phe Asn Asp Ala His		
580	585	590
Val Thr Gln Asn Ser Leu Val Asn Ser Glu Thr Leu Lys Ile Gly Asp		
595	600	605
Leu Thr Pro Gln Asn Leu Glu Arg Gln Val Asn Asn Leu Met Thr Phe		
610	615	620
Ser Val Gln Asn Gln Ala Ala Phe Gln Asn Asn Leu Pro Thr Ser Lys		
625	630	635
		640

Phe Glu Cys Gly Asp Asn Val Lys Thr Ser Ser Asn Leu Tyr Asn Leu  
 645 650 655  
 Pro Leu Lys Thr Leu Glu Ser Ile Ala Phe Val Pro Pro Gln Ser Asp  
 660 665 670  
 Leu Ser Asn Ser Leu Gly Thr Pro Ser Val Pro Pro Lys Ala Pro Val  
 675 680 685  
 Gln Lys Phe Ser Cys Gln Val Glu Gly Cys Thr Arg Thr Tyr Asn Ser  
 690 695 700  
 Ser Gln Ser Ile Gly Lys His Met Lys Thr Ala His Pro Asp Gln Tyr  
 705 710 715 720  
 Ala Ala Phe Lys Met Gln Arg Lys Ser Lys Lys Gly Gln Lys Ala Asn  
 725 730 735  
 Asn Leu Asn Thr Pro Asn Asn Gly Lys Phe Val Tyr Phe Leu Pro Ser  
 740 745 750  
 Pro Val Asn Ser Ser Asn Pro Phe Phe Thr Ser Gln Thr Lys Ala Asn  
 755 760 765  
 Gly Asn Pro Ala Cys Ser Ala Gln Leu Gln His Val Ser Pro Pro Ile  
 770 775 780  
 Phe Pro Ala His Leu Ala Ser Val Ser Thr Pro Leu Leu Ser Ser Met  
 785 790 795 800  
 Glu Ser Val Ile Asn Pro Asn Ile Thr Ser Gln Asp Lys Asn Glu Gln  
 805 810 815  
 Gly Gly Met Leu Cys Ser Gln Met Glu Asn Leu Pro Ser Thr Ala Leu  
 820 825 830  
 Pro Ala Gln Met Glu Asp Leu Thr Lys Thr Val Leu Pro Leu Asn Ile  
 835 840 845  
 Asp Ser Gly Ser Asp Pro Phe Leu Pro Leu Pro Ala Glu Ser Ser Ser  
 850 855 860  
 Met Ser Leu Phe Pro Ser Pro Ala Asp Ser Gly Thr Asn Ser Val Phe

865                      870                      875                      880  
Ser Gln Leu Glu Asn Asn Thr Asn His Tyr Ser Ser Gln Ile Glu Gly  
                         885                      890                      895  
Asn Thr Asn Ser Ser Phe Leu Lys Gly Gly Asn Gly Glu Asn Ala Val  
                         900                      905                      910  
Phe Pro Ser Gln Val Asn Val Ala Asn Asn Phe Ser Ser Thr Asn Ala  
                         915                      920                      925  
Gln Gln Ser Ala Pro Glu Lys Val Lys Lys Asp Arg Gly Arg Gly Pro  
                         930                      935                      940  
Asn Gly Lys Glu Arg Lys Pro Lys His Asn Lys Arg Ala Lys Trp Pro  
945                      950                      955                      960  
Ala Ile Ile Arg Asp Gly Lys Phe Ile Cys Ser Arg Cys Tyr Arg Ala  
                         965                      970                      975  
Phe Thr Asn Pro Arg Ser Leu Gly Gly His Leu Ser Lys Arg Ser Tyr  
                         980                      985                      990  
Cys Lys Pro Leu Asp Gly Ala Glu Ile Ala Gln Glu Leu Leu Gln Ser  
                         995                      1000                      1005  
Asn Gly Gln Pro Ser Leu Leu Ala Ser Met Ile Leu Ser Thr Asn Ala  
                         1010                      1015                      1020  
Val Asn Leu Gln Gln Pro Gln Gln Ser Thr Phe Asn Pro Glu Ala Cys  
1025                      1030                      1035                      1040  
Phe Lys Asp Pro Ser Phe Leu Gln Leu Leu Ala Glu Asn Arg Ser Pro  
                         1045                      1050                      1055  
Ala Phe Leu Pro Asn Thr Phe Pro Arg Ser Gly Val Thr Asn Phe Asn  
                         1060                      1065                      1070  
Thr Ser Val Ser Gln Glu Gly Ser Glu Ile Ile Lys Gln Ala Leu Glu  
                         1075                      1080                      1085  
Thr Ala Gly Ile Pro Ser Thr Phe Glu Gly Ala Glu Met Leu Ser His  
                         1090                      1095                      1100

Val Ser Thr Gly Cys Val Ser Asp Ala Ser Gln Val Asn Ala Thr Val  
1105 1110 1115 1120  
Met Pro Asn Pro Thr Val Pro Pro Leu Leu His Thr Val Cys His Pro  
1125 1130 1135  
Asn Thr Leu Leu Thr Asn Gln Asn Arg Thr Ser Asn Ser Lys Thr Ser  
1140 1145 1150  
Ser Ile Glu Glu Cys Ser Ser Leu Pro Val Phe Pro Thr Asn Asp Leu  
1155 1160 1165  
Leu Leu Lys Thr Val Glu Asn Gly Leu Cys Ser Ser Ser Phe Pro Asn  
1170 1175 1180  
Ser Gly Gly Pro Ser Gln Asn Phe Thr Ser Asn Ser Ser Arg Val Ser  
1185 1190 1195 1200  
Val Ile Ser Gly Pro Gln Asn Thr Arg Ser Ser His Leu Asn Lys Lys  
1205 1210 1215  
Gly Asn Ser Ala Ser Lys Arg Arg Lys Lys Val Ala Pro Pro Leu Ile  
1220 1225 1230  
Ala Pro Asn Ala Ser Gln Asn Leu Val Thr Ser Asp Leu Thr Thr Met  
1235 1240 1245  
Gly Leu Ile Ala Lys Ser Val Glu Ile Pro Thr Thr Asn Leu His Ser  
1250 1255 1260  
Asn Val Ile Pro Thr Cys Glu Pro Gln Ser Leu Val Glu Asn Leu Thr  
1265 1270 1275 1280  
Gln Lys Leu Asn Asn Val Asn Asn Gln Leu Phe Met Thr Asp Val Lys  
1285 1290 1295  
Glu Asn Phe Lys Thr Ser Leu Glu Ser His Thr Val Leu Ala Pro Leu  
1300 1305 1310  
Thr Leu Lys Thr Glu Asn Gly Asp Ser Gln Met Met Ala Leu Asn Ser  
1315 1320 1325  
Cys Thr Thr Ser Ile Asn Ser Asp Leu Gln Ile Ser Glu Asp Asn Val



1330 1335 1340  
Ile  
1345  
<210> 3095  
<211> 129  
<212> PRT  
<213> Homo sapiens  
<400> 3095  
Met Asn Pro Cys Ile Phe Leu Phe Ser Asn Met Ala Phe Glu Val Leu  
1 5 10 15  
Asn Leu Arg Ser Arg Asn His Ala Phe Leu Leu Ile Cys Arg Ala Ser  
20 25 30  
Leu Glu Leu Pro Pro Pro Ala Val Lys Gly Ala Cys Arg Pro Gly Arg  
35 40 45  
Leu Ser Pro Gly Ala Trp Leu Glu Val Ala Gly Ala Gly Thr Gly Arg  
50 55 60  
Ala Leu Ala Gly Val Val Val Gly Ser Ser Ala Leu Leu Pro Trp Leu  
65 70 75 80  
Pro Leu Leu Asn Pro Pro Leu Thr Phe Val Gly Ser Cys Ser Val Arg  
85 90 95  
Arg Glu Leu Gly Ala Leu Ala Pro Arg Leu Leu Ser Ser Gln Glu Asp  
100 105 110  
Leu Pro His Arg His Gln Trp Leu Leu Leu Trp Pro Arg Glu Val Gly  
115 120 125  
Leu

&lt;210&gt; 3096

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3096

Met Cys Gly Pro Pro Tyr Ala Ser Ala Thr His Gln Pro Ser Pro Cys

1 5 10 15

Pro Ser Ser Gly Ile Ala Leu Val Glu Gly Lys Lys Gly Arg Ala Gly

20 25 30

Trp Trp Val Glu Asn Thr Ser Val His Gln Ala Gly Pro Ala Cys Cys

35 40 45

Val Pro Pro Arg Cys Cys Pro Pro Thr Pro Gln Gln Ser Ser Glu Gly

50 55 60

Pro Pro Gly Gly Asp Leu Gly His Asn Arg Leu Pro Thr Gln Thr Pro

65 70 75 80

Ser Tyr Pro Cys Arg Gly His Pro Ala Pro Pro Arg His Cys Tyr Ala

85 90 95

Ile Ala Gly Gly Val Tyr Val Ser Cys Thr Ala Gln His His Ala Asp

100 105 110

Asp Val Leu His Pro Leu Leu Pro Ala Gly His Arg Ala Pro Gln Thr

115 120 125

Lys Glu Pro Ala Gln Gly Ala His Gly Glu Leu Ala Val Ser Lys Gly

130 135 140

Asp Leu Trp Trp Gly Leu Leu Pro Glu Leu Val Gln Pro Leu Leu Gln

145 150 155 160

Thr Val Ser Ala Arg Asp Pro Gln

165

&lt;210&gt; 3097

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3097

Met Gly Phe Lys Ile Ala Leu Asp Asp Glu Gly Thr Ala Gly Gly Trp

1 5 10 15

Leu Phe Trp Asp Asp Gly Gln Ser Ile Asp Thr Tyr Gly Lys Gly Leu

20 25 30

Tyr Tyr Leu Ala Ser Phe Ser Ala Ser Gln Asn Thr Met Gln Ser His

35 40 45

Ile Ile Phe Asn Asn Tyr Ile Thr Gly Thr Asn Pro Leu Lys Leu Gly

50 55 60

Tyr Ile Glu Ile Trp Gly Val Gly Ser Val Pro Val Thr Ser Val Ser

65 70 75 80

Ile Ser Val Ser Gly Met Val Ile Thr Pro Ser Phe Asn Asn Asp Pro

85 90 95

Thr Ala Gln Val Leu Ser Ile Asp Val Thr Asp Arg Asn Ile Ser Leu

100 105 110

His Asn Phe Thr Ser Leu Thr Trp Ile Ser Thr Leu

115 120

&lt;210&gt; 3098

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3098

Met Glu Ala Arg Leu Gln Val Asp Ser Ile Gly Ser His Ser Ser Trp

1 5 10 15

His Val Glu Tyr Tyr Leu His Ile Ser Leu Trp Lys His Ser Arg Leu

20 25 30

Tyr Arg Gly Gln Ala Trp Ser Leu Pro Ser His Gln Phe Cys Val Glu

35 40 45

Leu Pro Ser Leu Lys Met Val Asn Cys Phe Leu Leu Ala Phe Ile Leu

50 55 60

Ser Gly Ser Leu Thr Phe Arg Thr Leu Phe Ser Val Ser Asn Leu Phe

65 70 75 80

Ile Ser Gln Asp Pro Arg Leu Ser Tyr Leu His Val His Cys Lys Cys

85 90 95

Asn Val Asn Glu Ser Ser Asp Lys Ile Phe Leu Tyr Phe Val Ile Ser

100 105 110

Lys Glu Phe Leu Tyr Arg Arg Thr Gln Trp Gly Leu Ala Cys Thr Ser

115 120 125

Thr Ile Val Ser Glu

130

&lt;210&gt; 3099

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3099

Met Leu Ile Leu Thr Pro Phe Gln Gly Gln Gly His Gly Ala Gln Leu  
1 5 10 15  
Leu Glu Thr Val His Arg Tyr Tyr Thr Glu Phe Pro Thr Val Leu Asp  
20 25 30  
Ile Thr Ala Glu Asp Pro Ser Lys Ser Tyr Val Lys Leu Arg Asp Phe  
35 40 45  
Val Leu Val Lys Leu Cys Gln Asp Leu Pro Cys Phe Ser Arg Glu Lys  
50 55 60  
Leu Met Gln Gly Phe Asn Glu Asp Met Ala Ile Glu Ala Gln Gln Lys  
65 70 75 80  
Phe Lys Ile Asn Lys Gln His Ala Arg Arg Val Tyr Glu Ile Leu Arg  
85 90 95  
Leu Leu Val Thr Asp Met Ser Asp Ala Glu Gln Tyr Arg Ser Tyr Arg  
100 105 110  
Leu Asp Ile Lys Arg Arg Leu Ile Ser Pro Tyr Lys Val Gly Leu Ser  
115 120 125  
Arg Ile Leu Asn Thr Val Phe Phe Ser Leu Phe Lys Thr Glu Glu Lys  
130 135 140  
Leu Pro Asn Ile Ser Ile  
145 150

&lt;210&gt; 3100

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3100

Met Lys Arg Arg Met Phe Pro Arg Pro Cys Leu Ala Arg Met Pro Gly  
 1 5 10 15  
 Ser Arg Gly Ser Gly Ser Thr Pro Asp Gly Asn Arg Lys Cys Cys Arg  
 20 25 30  
 Phe Glu His Leu Leu Ile Ala His Pro Gly Ser Arg Gly Ser Arg Val  
 35 40 45  
 Leu Val Asp Ala Arg Asp Lys Leu Gly Ile Pro Trp Gln Tyr Ser Glu  
 50 55 60  
 Asn Glu Lys His Gly Met Phe Leu Met Ala Phe Glu Asn Lys Ala Gly  
 65 70 75 80  
 Leu Pro Val Glu Pro Ala Thr Phe Gln Leu Tyr Val Pro Ala Leu Ser  
 85 90 95  
 Ala Leu Trp Arg Asp Ser Gly Ile Arg Glu Ala Phe Ser Arg Arg Ser  
 100 105 110  
 Glu Phe Gln Leu Gly Glu Ser Val Lys Tyr Phe Leu Asp Asn Leu Asp  
 115 120 125  
 Arg Ile Gly Gln Leu Asn Tyr Phe Pro Ser Lys Gln Asp Ile Leu Leu  
 130 135 140  
 Ala Arg Lys Ala Thr Lys Gly Ile Val Glu His Asp Phe Val Ile Lys  
 145 150 155 160  
 Lys Ile Pro Phe Lys Met Val Asp Val Gly Gly Gln Arg Ser Gln Arg  
 165 170 175  
 Gln Lys Trp Phe Gln Cys Phe Asp Gly Ile Thr Ser Ile Leu Phe Met  
 180 185 190  
 Val Ser Ser Ser Glu Tyr Asp Gln Val Leu Met Glu Asp Arg Arg Thr  
 195 200 205  
 Asn Arg Leu Val Glu Ser Met Asn Ile Phe Glu Thr Ile Val Asn Asn  
 210 215 220  
 Lys Leu Phe Phe Asn Val Ser Ile Ile Leu Phe Leu Asn Lys Met Asp

225                      230                      235                      240  
 Leu Leu Val Glu Lys Val Lys Thr Val Ser Ile Lys Lys His Phe Pro  
                                  245                      250                      255  
 Asp Phe Arg Gly Asp Pro His Arg Leu Glu Asp Val Gln Arg Tyr Leu  
                                  260                      265                      270  
 Val Gln Cys Phe Asp Arg Lys Arg Arg Asn Arg Ser Lys Pro Leu Phe  
                                  275                      280                      285  
 His His Phe Thr Thr Ala Ile Asp Thr Glu Asn Val Arg Phe Val Phe  
                                  290                      295                      300  
 His Ala Val Lys Asp Thr Ile Leu Gln Glu Asn Leu Lys Asp Ile Met  
 305                      310                      315                      320  
 Leu Gln

<210> 3101

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3101

Met Gln Ala Gly Val Gln Trp Arg Ser Leu Ser Ser Leu Gln Pro Gln  
   1                      5                      10                      15  
 Pro Pro Glu Leu Lys His Ser Pro His Leu Ser Trp Asp His Arg Cys  
                                  20                      25                      30  
 Ala Pro Leu Cys Trp Ala Asn Phe Tyr Ile Phe Val Glu Thr Ala Phe  
                                  35                      40                      45  
 Cys His Val Ala Gln Ala Gly Leu Glu Leu Leu Ser Ser Ser Ser Leu  
                                  50                      55                      60





115 120 125  
Ala Arg Ile Ser Val Lys Gly Ile Arg His Asp Ile Thr Thr Ala Pro  
130 135 140  
Asp Gly Asp Tyr Trp Arg Leu Leu Pro Pro Gly Ile His Ile Val Ile  
145 150 155 160  
Ala Gln Ala Pro Gly Tyr Ala Lys Val Ile Lys Lys Val Ile Ile Pro  
165 170 175  
Ala Arg Met Lys Arg Ala Gly Arg Val Asp Phe Ile Leu Gln Pro Leu  
180 185 190  
Gly Met Gly Pro Lys Asn Phe Ile His Gly Leu Arg Arg Thr Gly Pro  
195 200 205  
His Asp Pro Leu Gly Gly Ala Ser Ser Leu Gly Glu Ala Thr Glu Pro  
210 215 220  
Asp Pro Leu Arg Ala Arg Arg Gln Pro Ser Ala Asp Gly Ser Lys Pro  
225 230 235 240  
Trp Trp Trp Ser Tyr Phe Thr Ser Leu Ser Thr His Arg Pro Arg Trp  
245 250 255  
Leu Leu Lys Tyr  
260

&lt;210&gt; 3103

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3103

Met Gly Asn Gln Ser Ser Val Pro Gln Asp Ser Pro Leu Gly Cys Ile  
1 5 10 15

Leu Arg Asn Trp Asp Lys Phe Asp Pro Gln Ala Leu Lys Arg Lys Arg  
 20 25 30  
 Leu Val Phe Leu Cys Asn Thr Val Trp Pro Lys Tyr Glu Leu Glu Gly  
 35 40 45  
 Gln Glu Ala Trp Pro Val Gly Gly Ser Leu Asn Val Asn Thr Ile Leu  
 50 55 60  
 Gln Leu Asp Val Tyr Cys Arg Gln Gln Arg Lys Trp Ser Glu Val Pro  
 65 70 75 80  
 Tyr Val Gln Thr Phe Met Ile Leu Arg Glu Asn Pro Asp Phe Cys Lys  
 85 90 95  
 Gly Cys Lys Ile Asp Pro Ala Leu Leu Ala Ile Leu Ser Arg Pro Leu  
 100 105 110  
 Gln Arg Pro Gln Pro Gly Gly Phe Asn Asp Phe Leu Val Asn Pro Pro  
 115 120 125  
 Gln Pro Pro Leu Pro Glu Thr Lys Glu Lys Glu Gln Ala Pro Pro Ala  
 130 135 140  
 Pro Ser Ser Leu Tyr Arg Thr Leu Ser Leu His Gly Ser Ala Ser Thr  
 145 150 155 160  
 Tyr Thr Arg Pro Ser Gly Pro Arg Ser Gly Ile Cys Leu Leu Pro Val  
 165 170 175  
 Val Ser Arg Pro Val Gly Pro Val Gln Val Gln Val Pro Phe Ser Met  
 180 185 190  
 Gln Asp Leu Ser Gln Val Lys Glu Gly Leu Gly Lys Phe Ser Glu Asn  
 195 200 205  
 Pro Gly Lys Phe Leu Glu Gly Phe Arg Lys Leu Thr Leu Thr Phe Glu  
 210 215 220  
 Leu Thr Trp Lys Asp Val Ala Ile Leu Leu Gly Gln Thr Leu Ser Leu  
 225 230 235 240  
 Glu Glu Arg Gln Thr Ile Trp Glu Ala Ala Arg Gln Cys Gly Asp Glu

245	250	255
Leu His Leu Ala Asp Ala Asn Tyr Pro Val Gly Ala Thr Ala Val Pro		
260	265	270
Leu Gln Asp Pro Asn Trp Asp Tyr Asp Thr Pro Ala Gly Ile Cys Ala		
275	280	285
Arg Asn His Met Leu Leu Cys Leu Ile Glu Gly Met Lys Arg Ser Gln		
290	295	300
Val Lys Pro Val Asn Tyr Asn Lys Leu Ala Thr Ile Asp Gln Gly Pro		
305	310	315
His Glu Asn Pro Thr Ala Phe Leu Glu Arg Leu Gln Glu Thr Leu Ile		
325	330	335
Lys His Thr Asn Leu Asp Pro Gly Ser Pro Glu Gly Gln Leu Val Leu		
340	345	350
Lys Asp His Phe Leu Thr Gln Ala Ala Pro Asp Ile Arg Arg Lys Leu		
355	360	365
Arg Met Leu Ala Leu Gly Thr Arg Ala Pro Met Ser Glu Ile Leu Lys		
370	375	380
Phe Ala Ser Ser Val Phe Tyr Asn Arg Asp Gln Asp Glu Arg Asp Arg		
385	390	395
Ala Glu Arg Lys Glu Lys Gln Lys Glu Glu Arg Gln Ala Gln Leu Leu		
405	410	415
Ala Ala Leu Gln Val His Gln Pro Pro Pro Gly Cys Pro Lys Asp Thr		
420	425	430
Phe Pro Gly Asn Cys Tyr Gln Cys Gly Lys Pro Gly His Trp Lys Ala		
435	440	445
Asn Cys Pro Tyr Gly Pro Arg Gly Glu Lys Pro Cys Thr Ala Cys Pro		
450	455	460
Leu Cys Arg Lys Leu Arg Tyr Trp Lys Glu Asn Cys Pro Glu Ser Gln		
465	470	475
		480

Lys Gly Pro

<210> 3104

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3104

Met Ile Lys Trp Val Ser Tyr Gln Gly Met Gln Gly Trp Phe Asn Ile

1 5 10 15

Leu Lys Pro Ile Ile Val Val His His Ile Ser Arg Met Lys Asn Gly

20 25 30

Asn His Met Ile Ile Ser Ile Asp Ala Arg Lys Gly Phe Asp Lys Ile

35 40 45

Gln His Pro Phe Met Met Lys Thr Leu Ser Lys Ile Gly Ile Glu Gly

50 55 60

Thr Tyr Leu Lys Val Ile Lys Ala Ile Tyr His Lys Ser Thr Ala Asn

65 70 75 80

Ile Ile Leu Asn Gly Glu Met Leu Lys Ala Phe Pro Leu Arg Thr Gly

85 90 95

Thr Arg Gln Gly Cys Leu Leu Ser Pro Leu Leu Phe Ser Ile Val Leu

100 105 110

Glu Val Leu Ala Arg Ala Ile Arg Glu Arg Lys Lys Ala His Pro Asn

115 120 125

Arg

&lt;210&gt; 3105

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3105

Met Leu Lys Leu Ser Ile Leu Pro Lys Ala Ile His Arg Phe Thr Ala

1 5 10 15

Ile Ser Ile Lys Ile Pro Met Ala Phe Phe Thr Glu Ile Glu Lys Ile

20 25 30

Thr Glu Lys Phe Thr Trp Asn His Glu Arg Pro Arg Ile Ala Lys Pro

35 40 45

Ile Leu Ser Lys Val Asn Lys Thr Gly Glu Ile Thr Leu Pro Asp Met

50 55 60

Lys Leu Tyr Tyr Ile Ala Ile Val Asn Lys Ile Pro Arg Tyr Ser Tyr

65 70 75 80

Lys Asn Arg His Thr Asp Gln Trp Asn Arg Ile Lys Lys Pro Glu Thr

85 90 95

Asn Pro Tyr Ile Tyr Ser Glu Leu Ile Phe Asn Lys Gly Tyr Gln Asp

100 105 110

Ala Ser Ser Ile His Trp Gly Lys Asp Ser Leu Phe Asn Lys Trp Ser

115 120 125

Trp Glu Asn Trp Ile Ser Thr Cys Arg Arg Met Lys Leu Asp Pro Tyr

130 135 140

Leu Leu Pro Tyr Thr Lys Leu Asn Lys Asn Gly Leu Lys Thr

145 150 155

&lt;210&gt; 3106

&lt;211&gt; 394

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3106

Met Phe Ser Glu Asp Asp Phe Gln Ser Thr Glu Arg Ala Pro Tyr Gly

1

5

10

15

Pro Gln Leu Gln Trp Ser Gln Asp Leu Pro Arg Val Gln Val Phe Arg

20

25

30

Glu Gln Ala Asn Leu Glu Asp Arg Ser Pro Arg Arg Thr Gln Arg Ile

35

40

45

Thr Gly Gly Glu Gln Val Leu Trp Gly Pro Ile Thr Gln Ile Phe Pro

50

55

60

Thr Val Arg Pro Ala Asp Leu Thr Arg Val Ile Met Pro Leu Glu Gln

65

70

75

80

Arg Ser Gln His Cys Lys Pro Glu Glu Gly Leu Gln Ala Gln Glu Glu

85

90

95

Asp Leu Gly Leu Val Gly Ala Gln Ala Leu Gln Ala Glu Glu Gln Glu

100

105

110

Ala Ala Phe Phe Ser Ser Thr Leu Asn Val Gly Thr Leu Glu Glu Leu

115

120

125

Pro Ala Ala Glu Ser Pro Ser Pro Pro Gln Ser Pro Gln Glu Glu Ser

130

135

140

Phe Ser Pro Thr Ala Met Asp Ala Ile Phe Gly Ser Leu Ser Asp Glu

145

150

155

160

Gly Ser Gly Ser Gln Glu Lys Glu Gly Pro Ser Thr Ser Pro Asp Leu

165

170

175

Ile Asp Pro Glu Ser Phe Ser Gln Asp Ile Leu His Asp Lys Ile Ile

180 185 190  
Asp Leu Val His Leu Leu Leu Arg Lys Tyr Arg Val Lys Gly Leu Ile  
195 200 205  
Thr Lys Ala Glu Met Leu Gly Ser Val Ile Lys Asn Tyr Glu Asp Tyr  
210 215 220  
Phe Pro Glu Ile Phe Arg Glu Ala Ser Val Cys Met Gln Leu Leu Phe  
225 230 235 240  
Gly Ile Asp Val Lys Glu Val Asp Pro Thr Ser His Ser Tyr Val Leu  
245 250 255  
Val Thr Ser Leu Asn Leu Ser Tyr Asp Gly Ile Gln Cys Asn Glu Gln  
260 265 270  
Ser Met Pro Lys Ser Gly Leu Leu Ile Ile Val Leu Gly Val Ile Phe  
275 280 285  
Met Glu Gly Asn Cys Ile Pro Glu Glu Val Met Trp Glu Val Leu Ser  
290 295 300  
Ile Met Gly Val Tyr Ala Gly Arg Glu His Phe Leu Phe Gly Glu Pro  
305 310 315 320  
Lys Arg Leu Leu Thr Gln Asn Trp Val Gln Glu Lys Tyr Leu Val Tyr  
325 330 335  
Arg Gln Val Pro Gly Thr Asp Pro Ala Cys Tyr Glu Phe Leu Trp Gly  
340 345 350  
Pro Arg Ala His Ala Glu Thr Ser Lys Met Lys Val Leu Glu Tyr Ile  
355 360 365  
Ala Asn Ala Asn Gly Arg Asp Pro Thr Ser Tyr Pro Ser Leu Tyr Glu  
370 375 380  
Asp Ala Leu Arg Glu Glu Gly Glu Gly Val  
385 390

&lt;210&gt; 3107

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3107

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Met Leu Thr Ala Val Cys Gly Ser Leu Gly Ser Gln His Thr Glu Ala
  1             5             10            15
Pro His Ala Ser Pro Pro Arg Leu Asp Leu Gln Pro Leu Gln Thr Tyr
          20            25            30
Gln Gly His Thr Ser Pro Glu Ala Gly Asp Tyr Pro Ser Pro Leu Gln
      35            40            45
Pro Gly Glu Leu Gln Ser Leu Pro Leu Gly Pro Glu Val Asp Phe Ser
      50            55            60
Gln Gly Tyr Glu Leu Pro Gly Ala Ser Ser Arg Val Thr Cys Glu Asp
      65            70            75            80
Leu Glu Ser Asp Ser Pro Leu Ala Pro Gly Pro Phe Ser Lys Leu Leu
          85            90            95
Gln Pro Asp Met Ser His His Tyr Glu Ser Trp Phe Arg Pro Thr His
          100           105           110
Pro Gly Ala Glu Asp Gly Ser Trp Trp Asp Leu His Pro Gly Thr Ser
          115           120           125
Trp Met Asp Leu Pro His Thr Gln Gly Ala Leu Thr Ser Pro Gly His
          130           135           140
Pro Gly Ala Leu Gln Ala Gly Leu Gly Gly Tyr Val Gly Asp His Gln
          145           150           155           160
Leu Cys Ala Pro Pro Pro His Pro His Ala His His Leu Leu Pro Ala
          165           170           175
Ala Gly Gly Gln His Leu Leu Gly Pro Pro Asp Gly Ala Lys Ala Leu

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180 185 190  
Glu Val Ala Ala Pro Glu Ser Gln Gly Leu Asp Ser Ser Leu Asp Gly  
195 200 205  
Ala Ala Arg Pro Lys Gly Ser Arg Arg Ser Val Pro Arg Ser Ser Gly  
210 215 220  
Gln Thr Val Cys Arg Cys Pro Asn Cys Leu Glu Ala Glu Arg Leu Gly  
225 230 235 240  
Ala Pro Cys Gly Pro Asp Gly Gly Lys Lys Lys His Leu His Asn Cys  
245 250 255  
His Ile Pro Gly Cys Gly Lys Ala Tyr Ala Lys Thr Ser His Leu Lys  
260 265 270  
Ala His Leu Arg Trp His Ser Gly Asp Arg Pro Phe Val Cys Asn Trp  
275 280 285  
Leu Phe Cys Gly Lys Arg Phe Thr Arg Ser Asp Glu Leu Gln Arg His  
290 295 300  
Leu Gln Thr His Thr Gly Thr Lys Lys Phe Pro Cys Ala Val Cys Ser  
305 310 315 320  
Arg Val Phe Met Arg Ser Asp His Leu Ala Lys His Met Lys Thr His  
325 330 335  
Glu Gly Ala Lys Glu Glu Ala Ala Gly Ala Ala Ser Gly Glu Gly Lys  
340 345 350  
Ala Gly Gly Ala Val Glu Pro Pro Gly Gly Lys Gly Lys Arg Glu Ala  
355 360 365  
Glu Gly Ser Val Ala Pro Ser Asn  
370 375

&lt;210&gt; 3108

&lt;211&gt; 396

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3108

Met Ala Gly Val Asp Leu Glu Trp Pro Gln Arg Arg Ser Gln Asp Thr  
1 5 10 15

Ser Glu Ala Arg Glu Pro Ala Pro Lys Arg Trp Lys Val Ser Cys Glu  
20 25 30

Ile Pro Asp Arg Leu Leu Leu Val Thr Ser Gly Lys Leu Cys Gln Pro  
35 40 45

Gly Ala Tyr Val Trp Ala Arg His Gln Arg Gly Leu Ala Ala Pro Arg  
50 55 60

Glu Arg Ala Arg Val Pro Arg Phe Thr Thr Thr Leu Ala Pro Cys Leu  
65 70 75 80

Arg Pro Asp Pro Pro Pro His Val Gly Cys Leu Leu Gly Leu Leu Gln  
85 90 95

Ala Ser Glu Ser Gly Gly Arg Ser Phe Pro Arg Val Ser Ala Leu Pro  
100 105 110

Ser Gln Val Pro Lys Ala Ser Pro Ala His Val Arg Arg Cys Pro Phe  
115 120 125

Gly Arg Pro Arg Val Gly Trp Leu Gly Trp Gly Ala Val Ala Ser Leu  
130 135 140

Ser Ala Leu Pro Leu Pro Pro Pro Gln Leu Ser Ile Pro Asn Ala Arg  
145 150 155 160

Ser Ser Pro Gly Cys Val Cys Ala Gly Trp Gly Leu Leu Arg Glu Ser  
165 170 175

Cys Arg Gly Gly Cys Pro Pro Pro Ile Leu Thr Leu His Pro Arg Arg  
180 185 190

Glu Arg Ser Lys Val Pro Tyr Ile Val Arg Gln Cys Val Glu Glu Val

195	200	205
Glu Lys Arg Gly Ile Glu Glu Val Gly Ile Tyr Arg Ile Ser Gly Val		
210	215	220
Ala Thr Asp Ile Gln Ala Leu Lys Ala Val Phe Asp Ala Asn Asn Lys		
225	230	235
Asp Ile Leu Leu Met Leu Ser Asp Met Asp Ile Asn Ala Ile Ala Gly		
245	250	255
Thr Leu Lys Leu Tyr Phe Arg Glu Leu Pro Glu Pro Leu Leu Thr Asp		
260	265	270
Arg Leu Tyr Pro Ala Phe Met Glu Gly Ile Ala Leu Ser Asp Pro Ala		
275	280	285
Ala Lys Glu Asn Cys Met Met His Leu Leu Arg Ser Leu Pro Asp Pro		
290	295	300
Asn Leu Ile Thr Phe Leu Phe Leu Leu Glu His Leu Glu Arg Val Ala		
305	310	315
Glu Lys Glu Pro Ile Asn Lys Met Ser Leu His Asn Leu Ala Thr Val		
325	330	335
Phe Gly Pro Thr Leu Leu Arg Pro Ser Glu Val Glu Ser Lys Ala His		
340	345	350
Leu Thr Ser Ala Ala Asp Ile Trp Ser His Asp Val Met Ala Gln Val		
355	360	365
Gln Val Leu Leu Tyr Tyr Leu Gln His Pro Pro Ile Ser Phe Ala Glu		
370	375	380
Leu Lys Arg Asn Thr Leu Tyr Phe Ser Thr Asp Val		
385	390	395

&lt;210&gt; 3109

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3109

Met Cys Gln Thr Leu Arg His Pro Gly Gly Gln Pro Phe Pro Leu Val

1 5 10 15

Gly Pro Pro Val Pro His Arg Ser Leu Arg Leu Ala Ser Phe Pro Ser

20 25 30

Leu Arg Ala Gln Pro Ala Pro Gly Gln Leu Pro Val Pro Ala Ala Thr

35 40 45

Pro Leu Leu Gly His Arg Leu Met Pro Glu Asn Ser Gln Glu Ser His

50 55 60

Ala Met Phe Asn Glu Arg Gln Asn Val Gly Thr Arg Cys Glu Ala Val

65 70 75 80

Pro Gly Cys Gly Arg Glu Thr Pro Gly Cys Ala Arg Gln Gly Ala Phe

85 90 95

Pro Trp Thr Leu Lys Gly Thr Arg Cys Pro Gly Ala Val Arg Gly Gly

100 105 110

Val Leu Ile His Val Thr Gly Phe Phe Gln

115 120

&lt;210&gt; 3110

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3110

Met Val Arg Ile Trp Thr Thr Ile Met Ile Val Leu Ile Leu Leu Leu

1	5	10	15
Arg Ile Gly Pro Asn Lys Pro Ser Leu Ser Gly Arg Gln Ala Pro Ala			
20	25	30	
Gln Ala Gln Thr Ser Asp Leu Val Pro Ser Leu Phe Pro Leu Gly Leu			
35	40	45	
Trp Ala Pro Gly Phe Cys Thr Trp Ser Ser Pro Asp Glu Asp Lys Val			
50	55	60	
Trp Arg Pro Ala Trp Glu Gln Gly Pro Lys Gly Glu Pro Asp Pro Arg			
65	70	75	80
Gly Leu Arg Pro Arg Lys Pro Val Pro Gly Thr Gly Asn Arg Asp Ser			
85	90	95	
Gly Thr Arg Arg Arg Leu Gln Asp Ala Thr Glu Gln Asp Pro Arg Pro			
100	105	110	
Gly Asn Asp Val Ala Ser Ala Glu Thr Ala Gly Pro Pro Ser Pro Ser			
115	120	125	
Gly Ile Arg Ala Gln Asp Arg Ala Pro Arg His Arg Arg Ala Pro Pro			
130	135	140	
Ala Arg Met Pro Val Ala Pro Ala Pro Ser Ala Asp Gly Glu Pro Leu			
145	150	155	160
Gln Glu Gln Gly Gly Gly Leu Phe His Arg Thr Arg Ser Val Tyr Asn			
165	170	175	
Gly Leu Glu Leu Asn Thr Trp Met Lys Val Glu Arg Leu Phe Val Glu			
180	185	190	
Lys Phe His Gln Ser Phe Ser Leu Asp Asn			
195	200		

&lt;210&gt; 3111

&lt;211&gt; 337

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3111

Met	Ala	Leu	His	Val	Ala	Ala	Arg	Tyr	Gly	His	Ala	Asp	Val	Ala	Gln
1				5					10					15	
Leu	Leu	Cys	Ser	Phe	Gly	Ser	Asn	Pro	Asn	Ile	Gln	Asp	Lys	Glu	Glu
				20				25					30		
Glu	Thr	Pro	Leu	His	Cys	Ala	Ala	Trp	His	Gly	His	Tyr	Ser	Val	Ala
				35				40					45		
Lys	Ala	Leu	Cys	Glu	Ala	Gly	Cys	Asn	Val	Asn	Ile	Lys	Asn	Arg	Glu
				50				55					60		
Gly	Glu	Thr	Pro	Leu	Leu	Thr	Ala	Ser	Ala	Arg	Gly	Tyr	His	Asp	Ile
				65				70					75		80
Val	Glu	Cys	Leu	Ala	Glu	His	Gly	Ala	Asp	Leu	Asn	Ala	Cys	Asp	Lys
								85					90		95
Asp	Gly	His	Ile	Ala	Leu	His	Leu	Ala	Val	Arg	Arg	Cys	Gln	Met	Glu
				100				105					110		
Val	Ile	Lys	Thr	Leu	Leu	Ser	Gln	Gly	Cys	Phe	Val	Asp	Tyr	Gln	Asp
				115				120					125		
Arg	His	Gly	Asn	Thr	Pro	Leu	His	Val	Ala	Cys	Lys	Asp	Gly	Asn	Met
				130				135					140		
Pro	Ile	Val	Val	Ala	Leu	Cys	Glu	Ala	Asn	Cys	Asn	Leu	Asp	Ile	Ser
				145				150					155		160
Asn	Lys	Tyr	Gly	Arg	Thr	Pro	Leu	His	Leu	Ala	Ala	Asn	Asn	Gly	Ile
								165					170		175
Leu	Asp	Val	Val	Arg	Tyr	Leu	Cys	Leu	Met	Gly	Ala	Ser	Val	Glu	Ala
				180				185					190		
Leu	Thr	Thr	Asp	Gly	Lys	Thr	Ala	Glu	Asp	Leu	Ala	Arg	Ser	Glu	Gln

195	200	205
His Glu His Val Ala Gly Leu Leu Ala Arg Leu Arg Lys Asp Thr His		
210	215	220
Arg Gly Leu Phe Ile Gln Gln Leu Arg Pro Thr Gln Asn Leu Gln Pro		
225	230	235
Arg Ile Lys Leu Lys Leu Phe Gly His Ser Gly Ser Gly Lys Thr Thr		
245	250	255
Leu Val Glu Ser Leu Lys Cys Gly Leu Leu Arg Ser Phe Phe Arg Arg		
260	265	270
Arg Arg Pro Arg Leu Ser Ser Thr Asn Ser Ser Arg Phe Pro Pro Ser		
275	280	285
Pro Leu Ala Ser Lys Pro Thr Gly Arg Asn Leu His Ala Gly Pro Val		
290	295	300
Ser Pro Ala Gly Val Gly Phe Arg Thr Leu Ser Phe Gln Gly Leu Gly		
305	310	315
Gly Lys Gly Val Val Phe Gly Ser Leu Gly Leu Tyr Trp Thr Leu Trp		
325	330	335
Pro		

&lt;210&gt; 3112

&lt;211&gt; 749

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3112

Met Val Gln Arg Ser Pro Pro Gly Pro Arg Ala Ala Ala Leu Lys Ala

1

5

10

15

Gly Asp Asp Gly Ser Ala Pro Ala Ala Leu Leu Leu Ala Leu Ala Gly  
                     20                                    25                                    30  
 Ala Leu Leu Ala Pro Cys Glu Ala Arg Gly Val Ser Leu Trp Asn Gln  
                     35                                    40                                    45  
 Gly Arg Ala Asp Glu Val Val Ser Ala Ser Val Arg Ser Gly Asp Leu  
                     50                                    55                                    60  
 Trp Ile Pro Val Lys Ser Phe Asp Ser Lys Asn His Pro Glu Val Leu  
                     65                                    70                                    75                                    80  
 Asn Ile Arg Leu Gln Arg Glu Ser Lys Glu Leu Ile Ile Asn Leu Glu  
                                     85                                    90                                    95  
 Arg Asn Glu Gly Leu Ile Ala Ser Ser Phe Thr Glu Thr His Tyr Leu  
                     100                                    105                                    110  
 Gln Asp Gly Thr Asp Val Ser Leu Ala Arg Asn Tyr Thr Gly His Cys  
                     115                                    120                                    125  
 Tyr Tyr His Gly His Val Arg Gly Tyr Ser Asp Ser Ala Val Ser Leu  
                     130                                    135                                    140  
 Ser Thr Cys Ser Gly Leu Arg Gly Leu Ile Val Phe Glu Asn Glu Ser  
                     145                                    150                                    155                                    160  
 Tyr Val Leu Glu Pro Met Lys Ser Ala Thr Asn Arg Tyr Lys Leu Phe  
                                     165                                    170                                    175  
 Pro Ala Lys Lys Leu Lys Ser Val Arg Gly Ser Cys Gly Ser His His  
                     180                                    185                                    190  
 Asn Thr Pro Asn Leu Ala Ala Lys Asn Val Phe Pro Pro Pro Ser Gln  
                     195                                    200                                    205  
 Thr Trp Ala Arg Arg His Lys Arg Glu Thr Leu Lys Ala Thr Lys Tyr  
                     210                                    215                                    220  
 Val Glu Leu Val Ile Val Ala Asp Asn Arg Glu Phe Gln Arg Gln Gly  
                     225                                    230                                    235                                    240  
 Lys Asp Leu Glu Lys Val Lys Gln Arg Leu Ile Glu Ile Ala Asn His



245 250 255  
Val Asp Lys Phe Tyr Arg Pro Leu Asn Ile Arg Ile Val Leu Val Gly  
260 265 270  
Val Glu Val Trp Asn Asp Met Asp Lys Cys Ser Val Ser Gln Asp Pro  
275 280 285  
Phe Thr Ser Leu His Glu Phe Leu Asp Trp Arg Lys Met Lys Leu Leu  
290 295 300  
Pro Arg Lys Ser His Asp Asn Ala Gln Leu Val Ser Gly Val Tyr Phe  
305 310 315 320  
Gln Gly Thr Thr Ile Gly Met Ala Pro Ile Met Ser Met Cys Thr Ala  
325 330 335  
Asp Gln Ser Gly Gly Ile Val Met Asp His Ser Asp Asn Pro Leu Gly  
340 345 350  
Ala Ala Val Thr Leu Ala His Glu Leu Gly His Asn Phe Gly Met Asn  
355 360 365  
His Asp Thr Leu Asp Arg Gly Cys Ser Cys Gln Met Ala Val Glu Lys  
370 375 380  
Gly Gly Cys Ile Met Asn Ala Ser Thr Gly Tyr Pro Phe Pro Met Val  
385 390 395 400  
Phe Ser Ser Cys Ser Arg Lys Asp Leu Glu Thr Ser Leu Glu Lys Gly  
405 410 415  
Met Gly Val Cys Leu Phe Asn Leu Pro Glu Val Arg Glu Ser Phe Gly  
420 425 430  
Gly Gln Lys Cys Gly Asn Arg Phe Val Glu Glu Gly Glu Glu Cys Asp  
435 440 445  
Cys Gly Glu Pro Glu Glu Cys Met Asn Arg Cys Cys Asn Ala Thr Thr  
450 455 460  
Cys Thr Leu Lys Pro Asp Ala Val Cys Ala His Gly Leu Cys Cys Glu  
465 470 475 480

Asp Cys Gln Leu Lys Pro Ala Gly Thr Ala Cys Arg Asp Ser Ser Asn			
485	490	495	
Ser Cys Asp Leu Pro Glu Phe Cys Thr Gly Ala Ser Pro His Cys Pro			
500	505	510	
Ala Asn Val Tyr Leu His Asp Gly His Ser Cys Gln Asp Val Asp Gly			
515	520	525	
Tyr Cys Tyr Asn Gly Ile Cys Gln Thr His Glu Gln Gln Cys Val Thr			
530	535	540	
Leu Trp Gly Pro Gly Ala Lys Pro Ala Pro Gly Ile Cys Phe Glu Arg			
545	550	555	560
Val Asn Ser Ala Gly Asp Pro Tyr Gly Asn Cys Gly Lys Val Ser Lys			
565	570	575	
Ser Ser Phe Ala Lys Cys Glu Met Arg Asp Ala Lys Cys Gly Lys Ile			
580	585	590	
Gln Cys Gln Gly Gly Ala Ser Arg Pro Val Ile Gly Thr Asn Ala Val			
595	600	605	
Ser Ile Glu Thr Asn Ile Pro Leu Gln Gln Gly Gly Arg Ile Leu Cys			
610	615	620	
Arg Gly Thr His Val Tyr Leu Gly Asp Asp Met Pro Asp Pro Gly Leu			
625	630	635	640
Val Leu Ala Gly Thr Lys Cys Ala Asp Gly Lys Ile Cys Leu Asn Arg			
645	650	655	
Gln Cys Gln Asn Ile Ser Val Phe Gly Val His Glu Cys Ala Met Gln			
660	665	670	
Cys His Gly Arg Gly Val Cys Asn Asn Arg Lys Asn Cys His Cys Glu			
675	680	685	
Ala His Trp Ala Pro Pro Phe Cys Asp Lys Phe Gly Phe Gly Gly Ser			
690	695	700	
Thr Asp Ser Gly Pro Ile Arg Gln Ala Gly Lys Glu Ala Arg Gln Glu			

705                      710                      715                      720  
Ala Ala Glu Ser Asn Arg Glu Arg Gly Gln Gly Gln Glu Pro Val Gly  
                         725                      730                      735  
Ser Gln Glu His Ala Ser Thr Ala Ser Leu Thr Leu Ile  
                         740                      745

<210> 3113

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3113

Met Leu Val Leu Ala Ser Asn Leu Pro Glu Gln Phe Asp Cys Ala Ile  
1                      5                      10                      15  
Asn Ser Arg Ile Asp Val Met Val His Phe Asp Leu Pro Gln Gln Glu  
20                      25                      30  
Glu Arg Glu Arg Leu Val Arg Leu His Phe Asp Asn Cys Val Leu Arg  
35                      40                      45  
Pro Ala Thr Glu Gly Lys Arg Arg Leu Lys Leu Ala Gln Phe Asp Tyr  
50                      55                      60  
Gly Arg Lys Cys Ser Glu Val Ala Arg Leu Thr Glu Gly Met Ser Gly  
65                      70                      75                      80  
Arg Glu Ile Ala Gln Leu Ala Val Ser Trp Gln Ala Thr Ala Tyr Ala  
85                      90                      95  
Ser Lys Asp Gly Val Leu Thr Glu Ala Met Met Asp Ala Cys Val Gln  
100                      105                      110  
Asp Ala Val Gln Gln Tyr Arg Gln Lys Met Arg Trp Leu Lys Ala Glu  
115                      120                      125

Gly Pro Gly Arg Gly Val Glu His Pro Leu Pro Gly Val Gln Gly Glu  
 130 135 140  
 Thr Leu Thr Ser Trp Ser Leu Ala Thr Asp Pro Ser Tyr Pro Cys Leu  
 145 150 155 160  
 Ala Gly Pro Cys Thr Phe Arg Ile Cys Ser Trp Met Gly Thr Gly Leu  
 165 170 175  
 Cys Pro Gly Pro Leu Ser Pro Arg Met Ser Cys Gly Gly Gly Arg Pro  
 180 185 190  
 Phe Cys Pro Pro Gly His Pro Leu Leu  
 195 200

<210> 3114

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3114

Met Thr Gln Pro Gln Glu Ala Leu Pro Met Cys Leu Arg Trp Ser Gly  
 1 5 10 15  
 His Asp Phe Val Leu Tyr Ile Leu Gly Lys His Glu Thr Ser Ile Asn  
 20 25 30  
 Thr Cys Lys Met Tyr Ile Gly Leu Val Gln Lys Gly Gly Thr Thr Gln  
 35 40 45  
 Ser Gly Asp Phe Gln Val Thr Gly Arg Phe Lys Asp Phe Leu Ile Cys  
 50 55 60  
 Asn Trp Leu Lys Glu Leu Leu Ser Ile Glu Arg Asn Val Trp Val Met  
 65 70 75 80  
 Ile Lys Asp Cys Gly Asp Glu Gly Phe Ile Val Gln Val Lys Pro Ser

	85	90	95
Glu Arg Thr Asp Cys Lys Cys Phe Leu Ser Asp Leu Arg Ser Leu Phe			
100	105	110	
Tyr Gln Gln Phe			
115			

&lt;210&gt; 3115

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3115

Met Val Ser Ser His Gly Gln Val Thr Leu Cys Thr Phe Gln Tyr Ile			
1	5	10	15
Pro Val Ile Phe Ser Leu Leu Val Ser Tyr His Asn Asn Ser Asn Ser			
20	25	30	
Ile Phe Phe Phe Phe Ile Gln Asp Ile Cys Val Lys Ala Tyr Leu Ala			
35	40	45	
Leu Arg His His Thr Asn Leu Leu Ile Ile Leu Phe Ser Met Met Leu			
50	55	60	
Met Thr Gly Met Pro Gln Leu Thr Ser Lys Glu Asp Ile Glu Tyr Ile			
65	70	75	80
Arg Asp Ala Leu Thr Val Gly Lys Asn Glu Glu Asp Ala Lys Lys Tyr			
85	90	95	
Phe Leu Asp Gln Ile Glu Val Cys Arg Asp Lys Gly Trp Thr Val Gln			
100	105	110	
Phe Asn Trp Phe Leu His Leu Val Leu Gly Ile Lys Gln Gly Glu Lys			
115	120	125	

His Ser Ala

130

<210> 3116

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3116

Met Glu Trp Ala Arg Met Ile Thr Glu Ala Glu Gly Ser Tyr Thr Leu

1 5 10 15

Ser Ser Ala Ser Trp Lys Gly Arg Arg Val Cys Ala Ala Ala Leu Ala

20 25 30

Arg Ala Trp Arg Pro Glu Asn Gln Ala Arg Arg Arg Gln His Thr Ser

35 40 45

Ser Leu Arg Ala Arg Glu Gly Gln Cys Ser Ser Ser Ser Arg Gln Ala

50 55 60

Glu Gly Gly Phe Ser Leu His Leu Cys Val Leu Leu Arg Ser Ser Met

65 70 75 80

Gly Trp Met Arg Pro Ile His Ile Ala Arg Ala Ser Ala Ser Leu Asn

85 90 95

Pro Pro Ser Tyr Leu Leu Leu Leu Asp Ala Val Arg Leu Gln Arg Arg

100 105 110

Cys Ser Leu Glu Gly Ser Cys Pro Thr Val Cys Ala Gly Ala Arg Met

115 120 125

Ser Ala Leu Val Gln Pro Cys Thr Pro Glu Ser Glu Ala Leu Thr Leu

130 135 140

Gly Ser Ile Lys Lys Val Ile Trp Pro Pro His Lys Ala Lys Thr Phe

145                      150                      155                      160  
Thr Leu Ala Phe Val Arg Asn Ser Phe Leu Lys Leu Asp Ser Leu Ala  
                         165                      170                      175  
Met Phe Lys Pro Leu Asn Ser Ser Ile Glu Leu Ser Ser Gly Asn His  
                         180                      185                      190  
Ala Thr Val Ile  
                         195

<210> 3117

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3117

Met Phe Phe Ala Gln Gly Arg Arg Trp Val His Leu Ala Ser Glu Ala  
1                      5                      10                      15  
Ile Gly Gln Cys Gln Ser Ser Ala Ala Lys Pro Arg Arg Ser Gly Lys  
                         20                      25                      30  
Glu Ser Val Gly Glu Pro Trp Ala Arg Val Pro Gly Ala Leu Glu Val  
                         35                      40                      45  
Ala Ala Ser Glu Leu Ile Leu Cys Leu Arg Phe Ile Lys Ser Lys Thr  
                         50                      55                      60  
Asp Ile Ser Ser Asp His Arg Leu Asp Phe Ser Leu Gln Ile Leu Ser  
65                      70                      75                      80  
Cys Asn Ser Ala His Ile Ala Ile Cys Ser Ser Trp Arg Lys Ser Lys  
                         85                      90                      95  
Leu Gln Ile Phe Tyr Ser Ala Lys Ser Leu Cys Ala  
                         100                      105

&lt;210&gt; 3118

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3118

Met Cys Lys Met Pro Ala Ala Pro Glu Trp Gln Trp Arg Val Ser Gly

1 5 10 15

Cys Val Arg Cys Pro Gly Arg Ser Leu Arg Ala Ala Leu Cys Glu Val

20 25 30

Gly Ser Leu Gly Pro Gly Ser Leu Glu Ala Glu Leu Arg Trp Gly Phe

35 40 45

Leu Phe Met Arg Leu Glu Val Leu Pro Lys Lys Leu Leu Pro Ala Pro

50 55 60

Thr Pro Ser Gln Gly Gly Thr Asp His Gly Gln Leu Ser Leu Ala Gly

65 70 75 80

Gly Thr Pro Ser Cys Arg Gly Gly Ala Val Ala Leu Lys Gly Pro Gly

85 90 95

Gln Asp Gln Gln Phe Ser Trp Gln Trp Cys Val Cys Pro His Phe Ala

100 105 110

Asp Glu Glu Thr Glu Ala Trp Lys Asp Pro Gly Pro Cys Pro Gly Pro

115 120 125

Thr Pro His Pro Gly Gly Ala Ala Leu Glu Ser Cys Ala Thr Ser Leu

130 135 140

Phe Ser Pro Gly Gly Gly Pro Cys Leu Leu Arg Pro Ala Thr Pro Ser

145 150 155 160

Pro Cys Cys Arg Gln Glu Asp Thr Ala Gly Ala Pro Gly Ser Leu Ser



	165	170	175
Arg Ser Trp Ala Arg Glu Pro Ser Ser Ile Ser Glu Pro Ala Met Gly			
	180	185	190
Cys Pro Leu Thr Phe Arg Ser His Val Pro Leu Arg Trp Ser Ser Ala			
	195	200	205
Ser Gly Pro Pro Ser Thr Leu Lys Ala Pro Val Ile Thr Trp Pro Thr			
	210	215	220
Arg Gln Ser Arg Trp Pro Pro Ser Lys Val Ser Arg			
225	230	235	

&lt;210&gt; 3119

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3119

Met Arg Arg Leu Ser Ile Val Met Lys Asn Pro Trp His Ser Pro His			
1	5	10	15
Pro Gln Thr His Gly Ser His Ser His Thr Gly Pro Lys Ala Thr Val			
	20	25	30
Ser Ala Ala Val Ala Pro Val Asp Ile Gly Lys Pro Gly Glu Gly Val			
	35	40	45
Glu Glu Ile Ser Trp Pro Pro Ala Gly Ser Leu Gly Phe Cys Ala Gln			
	50	55	60
Gly Ser Trp Ser Pro Lys Asn Phe Gln Lys Leu Thr Pro His Val Pro			
	65	70	75
Ile Leu Leu Gly Phe Leu Asp Phe Ser Glu Ala Pro Ala Glu Gly Ser			
	85	90	95

Arg Cys Ser Leu Glu Cys Arg Gly Ser Pro Leu Thr Trp Leu Leu Glu  
 100 105 110  
 Ser Leu Leu Phe Leu Leu Leu Leu Pro Ser Ser Ser Ser Ser Ser Leu  
 115 120 125  
 Ser Ile Ser Pro Ser Leu Cys Pro Ser Pro Val Pro Asp Leu Ala Ile  
 130 135 140  
 Pro Gly Cys Pro  
 145

<210> 3120

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3120

Met Ser Cys Leu Tyr Val Tyr Thr Asp Thr Tyr Glu Met His Ile Gly  
 1 5 10 15  
 Met Leu Gly Met Cys Ile Cys Ile Tyr Arg Glu Arg Asn Val Leu Thr  
 20 25 30  
 Thr Trp Lys Asp Tyr Leu Lys Thr Asn Glu Val Phe Pro Leu Pro Tyr  
 35 40 45  
 Ser Asn Lys Lys Val Gly Ser Pro Phe Asn Phe Ala Ile Phe Cys Tyr  
 50 55 60  
 Tyr Ile Tyr Arg Lys Ala Ala Phe Tyr Asn Ala Glu Ile Met Val Tyr  
 65 70 75 80  
 Leu Arg Ile Ser Asp Gln Glu Gln Ile Ser Ile Phe Ser Tyr Cys Phe  
 85 90 95  
 Ser Val Cys Cys Lys Arg Lys Arg Glu Ser Phe Lys Lys Cys Asn Cys

100 105 110  
 Gly Leu Tyr Gln His Cys Tyr Phe Arg Thr Leu Val Ser Phe Phe Leu  
 115 120 125  
 Leu Ser Phe Phe Phe Leu Phe Phe Ile Ile Leu  
 130 135

<210> 3121

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3121

Met Cys Gln Gly Gly Phe Lys Ala Pro Ser Arg Glu Ser Val Met Gly  
 1 5 10 15  
 Pro Ala Ala Gly Phe Ile Leu Ser Leu Gln Pro Ala Gly Gly Ser Ser  
 20 25 30  
 Pro Pro Arg Ser Glu Thr Lys Asn Gln Lys Gln Gly Leu Cys Val Cys  
 35 40 45  
 Val His Val Cys Ile Cys Ala Cys Ile Cys Ala Cys Val Trp Lys Phe  
 50 55 60  
 Pro Cys Arg Asn His Ser Val Gln Thr Glu Ser Leu Asn Gly Val Asn  
 65 70 75 80  
 Arg Glu Phe Ser Glu Ala Ser Ala Val Phe Val His Val Tyr Ile Leu  
 85 90 95  
 Ser Leu Leu Leu Cys Leu Val Gln His Arg His Pro Leu Phe Glu Ile  
 100 105 110  
 Trp Gly Ala Ser Thr Thr Arg Gln Phe Cys Ser Arg Ala Val Asn Ser  
 115 120 125

Leu Pro Glu Leu Tyr Pro Phe His Trp Arg Ala Leu Ala Ala Gly Arg  
 130 135 140  
 Leu Leu Ser Ile Ala Ala Val Ser Gly Ser Asp Leu Pro Leu Ser Arg  
 145 150 155 160  
 Gly Asp Arg Ser Ala Pro Arg Ala Leu Phe Ser Gly Gly Leu Val Ser  
 165 170 175  
 Ala Glu Arg Cys Leu Ser Trp Pro Arg Cys Ser Arg Gly Lys Gly Gln  
 180 185 190  
 Pro Val Pro Pro Leu Tyr Thr Gly Ser Leu Ala Gln  
 195 200

<210> 3122

<211> 923

<212> PRT

<213> Homo sapiens

<400> 3122

Met Ala Ala Ser Thr Gly Tyr Val Arg Leu Trp Gly Ala Ala Arg Cys  
 1 5 10 15  
 Trp Val Leu Arg Arg Pro Met Leu Ala Ala Ala Gly Gly Arg Val Pro  
 20 25 30  
 Thr Ala Ala Gly Ala Trp Leu Leu Arg Gly Gln Arg Thr Cys Asp Ala  
 35 40 45  
 Ser Pro Pro Trp Ala Leu Trp Gly Arg Gly Pro Ala Ile Gly Gly Ser  
 50 55 60  
 Ala Gly Ala Gly Glu Gly Pro Val Ile Thr Ala Leu Thr Pro Met Thr  
 65 70 75 80  
 Ile Pro Asp Val Phe Pro His Leu Pro Leu Ile Ala Ile Thr Arg Asn

	85	90	95
Pro Val Phe Pro Arg Phe Ile Lys Ile Ile Glu Val Lys Asn Lys Lys			
100	105	110	
Leu Val Glu Leu Leu Arg Arg Lys Val Arg Leu Ala Gln Pro Tyr Val			
115	120	125	
Gly Val Phe Leu Lys Arg Asp Asp Ser Asn Glu Ser Asp Val Val Glu			
130	135	140	
Ser Leu Asp Glu Ile Tyr His Thr Gly Thr Phe Ala Gln Ile His Glu			
145	150	155	160
Met Gln Asp Leu Gly Asp Lys Leu Arg Met Ile Val Met Gly His Arg			
165	170	175	
Arg Val His Ile Ser Arg Gln Leu Glu Val Glu Pro Glu Glu Pro Glu			
180	185	190	
Ala Glu Asn Lys His Lys Pro Arg Arg Lys Ser Lys Arg Gly Lys Lys			
195	200	205	
Glu Ala Glu Asp Glu Leu Ser Ala Arg His Pro Ala Glu Leu Ala Met			
210	215	220	
Glu Pro Thr Pro Glu Leu Pro Ala Glu Val Leu Met Val Glu Val Glu			
225	230	235	240
Asn Val Val His Glu Asp Phe Gln Val Thr Glu Glu Val Lys Ala Leu			
245	250	255	
Thr Ala Glu Ile Val Lys Thr Ile Arg Asp Ile Ile Ala Leu Asn Pro			
260	265	270	
Leu Tyr Arg Glu Ser Val Leu Gln Met Met Gln Ala Gly Gln Arg Val			
275	280	285	
Val Asp Asn Pro Ile Tyr Leu Ser Asp Met Gly Ala Ala Leu Thr Gly			
290	295	300	
Ala Glu Ser His Glu Leu Gln Asp Val Leu Glu Glu Thr Asn Ile Pro			
305	310	315	320

Lys Arg Leu Tyr Lys Ala Leu Ser Leu Leu Lys Lys Glu Phe Glu Leu  
325 330 335  
Ser Lys Leu Gln Gln Arg Leu Gly Arg Glu Val Glu Glu Lys Ile Lys  
340 345 350  
Gln Thr His Arg Lys Tyr Leu Leu Gln Glu Gln Leu Lys Ile Ile Lys  
355 360 365  
Lys Glu Leu Gly Leu Glu Lys Asp Asp Lys Asp Ala Ile Glu Glu Lys  
370 375 380  
Phe Arg Glu Arg Leu Lys Glu Leu Val Val Pro Lys His Val Met Asp  
385 390 395 400  
Val Val Asp Glu Glu Leu Ser Lys Leu Gly Leu Leu Asp Asn His Ser  
405 410 415  
Ser Glu Phe Asn Val Thr Arg Asn Tyr Leu Asp Trp Leu Thr Ser Ile  
420 425 430  
Pro Trp Gly Lys Tyr Ser Asn Glu Asn Leu Asp Leu Ala Arg Ala Gln  
435 440 445  
Ala Val Leu Glu Glu Asp His Tyr Gly Met Glu Asp Val Lys Lys Arg  
450 455 460  
Ile Leu Glu Phe Ile Ala Val Ser Gln Leu Arg Gly Ser Thr Gln Gly  
465 470 475 480  
Lys Ile Leu Cys Phe Tyr Gly Pro Pro Gly Val Gly Lys Thr Ser Ile  
485 490 495  
Ala Arg Ser Ile Ala Arg Ala Leu Asn Arg Glu Tyr Phe Arg Phe Ser  
500 505 510  
Val Gly Gly Met Thr Asp Val Ala Glu Ile Lys Gly His Arg Arg Thr  
515 520 525  
Tyr Val Gly Ala Met Pro Gly Lys Ile Ile Gln Cys Leu Lys Lys Thr  
530 535 540  
Lys Thr Glu Asn Pro Leu Ile Leu Ile Asp Glu Val Asp Lys Ile Gly

545                      550                      555                      560  
Arg Gly Tyr Gln Gly Asp Pro Ser Ser Ala Leu Leu Glu Leu Leu Asp  
                                 565                      570                      575  
Pro Glu Gln Asn Ala Asn Phe Leu Asp His Tyr Leu Asp Val Pro Val  
                                 580                      585                      590  
Asp Leu Ser Lys Val Leu Phe Ile Cys Thr Ala Asn Val Thr Asp Thr  
                                 595                      600                      605  
Ile Pro Glu Pro Leu Arg Asp Arg Met Glu Met Ile Asn Val Ser Gly  
                                 610                      615                      620  
Tyr Val Ala Gln Glu Lys Leu Ala Ile Ala Glu Arg Tyr Leu Val Pro  
625                      630                      635                      640  
Gln Ala Arg Ala Leu Cys Gly Leu Asp Glu Ser Lys Ala Lys Leu Ser  
                                 645                      650                      655  
Ser Asp Val Leu Thr Leu Leu Ile Lys Gln Tyr Cys Arg Glu Ser Gly  
                                 660                      665                      670  
Val Arg Asn Leu Gln Lys Gln Val Glu Lys Val Leu Arg Lys Ser Ala  
                                 675                      680                      685  
Tyr Lys Ile Val Ser Gly Glu Ala Glu Ser Val Glu Val Thr Pro Glu  
                                 690                      695                      700  
Asn Leu Gln Asp Phe Val Gly Lys Pro Val Phe Thr Val Glu Arg Met  
705                      710                      715                      720  
Tyr Asp Val Thr Pro Pro Gly Val Val Met Gly Leu Ala Trp Thr Ala  
                                 725                      730                      735  
Met Gly Gly Ser Thr Leu Phe Val Glu Thr Ser Leu Arg Arg Pro Gln  
                                 740                      745                      750  
Asp Lys Asp Ala Lys Gly Asp Lys Asp Gly Ser Leu Glu Val Thr Gly  
                                 755                      760                      765  
Gln Leu Gly Glu Val Met Lys Glu Ser Ala Arg Ile Ala Tyr Thr Phe  
                                 770                      775                      780

Ala Arg Ala Phe Leu Met Gln His Ala Pro Ala Asn Asp Tyr Leu Val  
 785                      790                      795                      800  
 Thr Ser His Ile His Leu His Val Pro Glu Gly Ala Thr Pro Lys Asp  
                             805                      810                      815  
 Gly Pro Ser Ala Gly Cys Thr Ile Val Thr Ala Leu Leu Ser Leu Ala  
                             820                      825                      830  
 Met Gly Arg Pro Val Arg Gln Asn Leu Ala Met Thr Gly Glu Val Ser  
                             835                      840                      845  
 Leu Thr Gly Lys Ile Leu Pro Val Gly Gly Ile Lys Glu Lys Thr Ile  
                             850                      855                      860  
 Ala Ala Lys Arg Ala Gly Val Thr Cys Ile Val Leu Pro Ala Glu Asn  
 865                      870                      875                      880  
 Lys Lys Asp Phe Tyr Asp Leu Ala Ala Phe Ile Thr Glu Gly Leu Glu  
                             885                      890                      895  
 Val His Phe Val Glu His Tyr Arg Glu Ile Phe Asp Ile Ala Phe Pro  
                             900                      905                      910  
 Asp Glu Gln Ala Glu Ala Leu Ala Val Glu Arg  
                             915                      920

<210> 3123

<211> 1533

<212> PRT

<213> Homo sapiens

<400> 3123

Met Met Gln Leu Thr Leu Asn Thr Leu Phe Pro Val Val Ser Thr Pro  
 1                      5                      10                      15  
 Ala Ile Thr Tyr Ile Val Thr Val Phe Thr Gly Asp Val Arg Gly Ala



20	25	30
Gly Thr Lys Ser Lys Ile Tyr Leu Val Met Tyr Gly Ala Arg Gly Asn		
35	40	45
Lys Asn Ser Gly Lys Ile Phe Leu Glu Gly Gly Val Phe Asp Arg Gly		
50	55	60
Arg Thr Asp Ile Phe His Ile Glu Leu Ala Val Leu Leu Ser Pro Leu		
65	70	75
Ser Arg Val Ser Val Gly His Gly Asn Val Gly Val Asn Arg Gly Trp		
85	90	95
Phe Cys Glu Lys Val Val Ile Leu Cys Pro Phe Thr Gly Ile Gln Gln		
100	105	110
Thr Phe Pro Cys Ser Asn Trp Leu Asp Glu Lys Lys Ala Asp Gly Leu		
115	120	125
Ile Glu Arg Gln Leu Tyr Glu Met Val Ser Leu Arg Lys Lys Arg Leu		
130	135	140
Lys Lys Phe Pro Trp Ser Leu Trp Val Trp Thr Thr Asp Leu Lys Lys		
145	150	155
Ala Gly Thr Asn Ser Pro Ile Phe Ile Gln Ile Tyr Gly Gln Lys Gly		
165	170	175
Arg Thr Asp Glu Ile Leu Leu Asn Pro Asn Asn Lys Trp Phe Lys Pro		
180	185	190
Gly Ile Ile Glu Lys Phe Arg Ile Glu Leu Pro Asp Leu Gly Arg Phe		
195	200	205
Tyr Lys Ile Arg Val Trp His Asp Lys Arg Ser Ser Gly Ser Gly Trp		
210	215	220
His Leu Glu Arg Met Thr Leu Met Asn Thr Leu Asn Lys Asp Lys Tyr		
225	230	235
Asn Phe Asn Cys Asn Arg Trp Leu Asp Ala Asn Glu Asp Asp Asn Glu		
245	250	255

Ile Val Arg Glu Met Thr Ala Glu Gly Pro Thr Val Arg Arg Ile Met  
260 265 270  
Gly Met Ala Arg Tyr His Val Thr Val Cys Thr Gly Glu Leu Glu Gly  
275 280 285  
Ala Gly Thr Asp Ala Asn Val Tyr Leu Cys Leu Phe Gly Asp Val Gly  
290 295 300  
Asp Thr Gly Glu Arg Leu Leu Tyr Asn Cys Arg Asn Asn Thr Asp Leu  
305 310 315 320  
Phe Glu Lys Gly Asn Ala Asp Glu Phe Thr Ile Glu Ser Val Thr Met  
325 330 335  
Arg Asn Val Arg Arg Val Arg Ile Arg His Asp Gly Lys Asp Ser Gly  
340 345 350  
Ser Gly Trp Tyr Leu Asp Arg Val Leu Val Arg Glu Glu Gly Gln Pro  
355 360 365  
Glu Ser Asp Asn Val Glu Phe Pro Cys Leu Arg Trp Leu Asp Lys Asp  
370 375 380  
Lys Asp Asp Gly Gln Leu Val Arg Glu Leu Leu Pro Ser Asp Ser Ser  
385 390 395 400  
Ala Thr Leu Lys Asn Phe Arg Tyr His Ile Ser Leu Lys Thr Gly Asp  
405 410 415  
Val Ser Gly Ala Ser Thr Asp Ser Arg Val Tyr Ile Lys Leu Tyr Gly  
420 425 430  
Asp Lys Ser Asp Thr Ile Lys Gln Val Leu Leu Val Ser Asp Asn Asn  
435 440 445  
Leu Lys Asp Tyr Phe Glu Arg Gly Arg Val Asp Glu Phe Thr Leu Glu  
450 455 460  
Thr Leu Asn Ile Gly Asn Ile Asn Arg Leu Val Ile Gly His Asp Ser  
465 470 475 480  
Thr Gly Met His Val Ser Trp Phe Leu Gly Ser Val Gln Ile Arg Val

485	490	495
Pro Arg Gln Gly Lys Gln Tyr Thr Phe	Pro Ala Asn Arg Trp Leu Asp	
500	505	510
Lys Asn Gln Ala Asp Gly Arg Leu Glu Val Glu Leu Tyr Pro Ser Glu		
515	520	525
Val Val Glu Ile Gln Lys Leu Val His Tyr Glu Val Glu Ile Trp Thr		
530	535	540
Gly Asp Val Gly Gly Ala Gly Thr Ser Ala Arg Val Tyr Met Gln Ile		
545	550	555
Tyr Gly Glu Lys Gly Lys Thr Glu Val Leu Phe Leu Ser Ser Arg Ser		
565	570	575
Lys Val Phe Glu Arg Ala Ser Lys Asp Thr Phe Gln Leu Glu Ala Ala		
580	585	590
Asp Val Gly Glu Val Tyr Lys Leu Arg Leu Gly His Thr Gly Glu Gly		
595	600	605
Phe Gly Pro Ser Trp Phe Val Asp Thr Val Trp Leu Arg His Leu Val		
610	615	620
Val Arg Glu Val Asp Leu Thr Pro Glu Glu Glu Ala Arg Lys Lys Lys		
625	630	635
Glu Lys Asp Lys Leu Arg Gln Leu Leu Lys Lys Glu Arg Leu Lys Ala		
645	650	655
Lys Leu Gln Arg Lys Lys Lys Lys Arg Lys Gly Ser Asp Glu Glu Asp		
660	665	670
Glu Gly Glu Glu Glu Glu Ser Ser Ser Ser Glu Glu Ser Ser Thr Glu		
675	680	685
Glu Glu Glu Met Glu Glu Glu Glu Glu Glu Glu Glu Phe Gly Pro Gly		
690	695	700
Met Gln Glu Val Ile Glu Gln His Lys Phe Glu Ala His Arg Trp Leu		
705	710	715
		720

Ala Arg Gly Lys Glu Asp Asn Glu Leu Val Val Glu Leu Val Pro Ala  
725 730 735  
Gly Lys Pro Gly Pro Glu Arg Asn Thr Tyr Glu Val Gln Val Val Thr  
740 745 750  
Gly Asn Val Pro Lys Ala Gly Thr Asp Ala Asn Gly Tyr Leu Thr Ile  
755 760 765  
Tyr Gly Glu Glu Tyr Gly Asp Thr Gly Glu Arg Pro Leu Lys Lys Ser  
770 775 780  
Asp Lys Ser Asn Lys Phe Glu Gln Gly Gln Thr Asp Thr Phe Thr Ile  
785 790 795 800  
Tyr Ala Ile Asp Leu Gly Ala Leu Thr Lys Ile Arg Ile Arg His Asp  
805 810 815  
Asn Thr Gly Asn Arg Ala Gly Trp Phe Leu Asp Arg Ile Asp Ile Thr  
820 825 830  
Asp Met Asn Asn Glu Ile Thr Tyr Tyr Phe Pro Cys Gln Arg Trp Leu  
835 840 845  
Ala Val Glu Glu Asp Asp Gly Gln Leu Ser Arg Glu Leu Leu Pro Val  
850 855 860  
Asp Glu Ser Tyr Val Leu Pro Gln Ser Glu Glu Gly Gly Gly Gly Gly  
865 870 875 880  
Asp Asn Asn Pro Leu Asp Asn Leu Ala Leu Glu Gln Lys Asp Gln Ser  
885 890 895  
Thr Thr Phe Ser Val Thr Ile Lys Thr Gly Val Lys Lys Asn Ala Gly  
900 905 910  
Thr Asp Ala Asn Val Phe Ile Thr Leu Phe Gly Thr Gln Asp Asp Thr  
915 920 925  
Gly Met Thr Leu Leu Lys Ser Ser Lys Thr Asn Ser Asp Lys Phe Glu  
930 935 940  
Arg Asp Ser Ile Glu Ile Phe Thr Val Glu Thr Leu Asp Leu Gly Asp

945                      950                      955                      960  
Leu Trp Lys Val Arg Leu Gly His Asp Asn Thr Gly Lys Ala Pro Gly  
                         965                      970                      975  
Trp Phe Val Asp Trp Val Glu Val Asp Ala Pro Ser Leu Gly Lys Cys  
                         980                      985                      990  
Met Thr Phe Pro Cys Gly Arg Trp Leu Ala Lys Asn Glu Asp Asp Gly  
                         995                      1000                      1005  
Ser Ile Ile Arg Asp Leu Phe His Ala Glu Leu Gln Thr Arg Leu Tyr  
                         1010                      1015                      1020  
Thr Pro Phe Val Pro Tyr Glu Ile Thr Leu Tyr Thr Ser Asp Val Phe  
1025                      1030                      1035                      1040  
Ala Ala Gly Thr Asp Ala Asn Ile Phe Ile Ile Ile Tyr Gly Cys Asp  
                         1045                      1050                      1055  
Ala Val Cys Thr Gln Gln Lys Tyr Leu Cys Thr Asn Lys Arg Glu Gln  
                         1060                      1065                      1070  
Lys Gln Phe Phe Glu Arg Lys Ser Ala Ser Arg Phe Ile Val Glu Leu  
                         1075                      1080                      1085  
Glu Asp Val Gly Glu Ile Ile Glu Lys Ile Arg Ile Gly His Asn Asn  
                         1090                      1095                      1100  
Thr Gly Met Asn Pro Gly Trp His Cys Ser His Val Asp Ile Arg Arg  
1105                      1110                      1115                      1120  
Leu Leu Pro Asp Lys Asp Gly Ala Glu Thr Leu Thr Phe Pro Cys Asp  
                         1125                      1130                      1135  
Arg Trp Leu Ala Thr Ser Glu Asp Asp Lys Lys Thr Ile Arg Glu Leu  
                         1140                      1145                      1150  
Val Pro Tyr Asp Ile Phe Thr Glu Lys Tyr Met Lys Asp Gly Ser Leu  
                         1155                      1160                      1165  
Arg Gln Val Tyr Lys Glu Val Glu Glu Pro Leu Asp Ile Val Leu Tyr  
                         1170                      1175                      1180

Ser Val Gln Ile Phe Thr Gly Asn Ile Pro Gly Ala Gly Thr Asp Ala  
1185 1190 1195 1200  
Lys Val Tyr Ile Thr Ile Tyr Gly Asp Leu Gly Asp Thr Gly Glu Arg  
1205 1210 1215  
Tyr Leu Gly Lys Ser Glu Asn Arg Thr Asn Lys Phe Glu Arg Gly Thr  
1220 1225 1230  
Ala Asp Thr Phe Ile Ile Glu Ala Ala Asp Leu Gly Val Ile Tyr Lys  
1235 1240 1245  
Ile Lys Leu Arg His Asp Asn Ser Lys Trp Cys Ala Asp Trp Tyr Val  
1250 1255 1260  
Glu Lys Val Glu Ile Trp Asn Asp Thr Asn Glu Asp Glu Phe Leu Phe  
1265 1270 1275 1280  
Leu Cys Gly Arg Trp Leu Ser Leu Lys Lys Glu Asp Gly Arg Leu Glu  
1285 1290 1295  
Arg Leu Phe Tyr Glu Lys Glu Tyr Thr Gly Asp Arg Ser Ser Asn Cys  
1300 1305 1310  
Ser Ser Pro Ala Asp Phe Trp Glu Ile Ala Leu Ser Ser Lys Met Ala  
1315 1320 1325  
Asp Val Asp Ile Ser Thr Val Thr Gly Pro Met Ala Asp Tyr Val Gln  
1330 1335 1340  
Glu Gly Pro Ile Ile Pro Tyr Tyr Val Ser Val Thr Thr Gly Lys His  
1345 1350 1355 1360  
Lys Asp Ala Ala Thr Asp Ser Arg Ala Phe Ile Phe Leu Ile Gly Glu  
1365 1370 1375  
Asp Asp Glu Arg Ser Lys Arg Ile Trp Leu Asp Tyr Pro Arg Gly Lys  
1380 1385 1390  
Arg Gly Phe Ser Arg Gly Ser Val Glu Glu Phe Tyr Val Ala Gly Leu  
1395 1400 1405  
Asp Val Gly Ile Ile Lys Lys Ile Glu Val Leu Tyr Glu Met Thr Val

1410                      1415                      1420  
 Trp Thr Gly Asp Val Val Gly Gly Gly Thr Asp Ser Asn Ile Phe Met  
 1425                      1430                      1435                      1440  
 Thr Leu Tyr Gly Ile Asn Gly Ser Thr Glu Glu Met Gln Leu Asp Lys  
                          1445                      1450                      1455  
 Arg Lys Ala Arg Phe Glu Arg Glu Gln Asn Asp Thr Phe Ile Met Glu  
                          1460                      1465                      1470  
 Ile Leu Asp Ile Ala Pro Phe Thr Lys Met Arg Ile Arg Ile Asp Gly  
                          1475                      1480                      1485  
 Leu Gly Ser Arg Pro Glu Trp Phe Leu Glu Arg Val Lys Cys Leu Asp  
                          1490                      1495                      1500  
 Pro His Ser Ser Phe Gln Pro Pro Pro Thr Pro Ser Pro Gly Ser Ser  
 1505                      1510                      1515                      1520  
 Gly Leu Ser Met Asp Leu Val Lys Ala Gln Met Ser Leu  
                          1525                      1530

<210> 3124

<211> 260

<212> PRT

<213> Homo sapiens

<400> 3124

Met Glu Thr Ser Pro Arg Leu Gly Val Met Glu Lys Ala Lys Ser Leu  
   1                      5                      10                      15  
 Lys Ser Thr His Ala His Phe Phe Phe Phe Asp Thr Glu Ser Cys  
                          20                      25                      30  
 Ser Val Ala Gln Ala Gly Ala Gln Trp Cys Asn Leu Ser Ser Leu Gln  
                          35                      40                      45

Pro Pro Pro Pro Glu Leu Lys Gly Phe Phe Cys Leu Ser Leu Leu Thr  
 50 55 60  
 Ser Trp Asp Tyr Arg His Ala Pro Pro Arg Pro Ala Asn Phe Cys Ile  
 65 70 75 80  
 Phe Ser Arg Asp Gly Val Ser Pro Gly Trp Ser Arg Thr Ser Asp Leu  
 85 90 95  
 Arg Trp Ser Thr His Leu Cys Leu Pro Lys Cys Trp Asp Tyr Arg Arg  
 100 105 110  
 Glu Pro Leu His Pro Ala Thr His Ala Leu Phe Lys Lys Pro His Asp  
 115 120 125  
 Thr Ser Val Phe Val His Thr Asp Pro Glu Lys Asp Asn Ser Leu Ala  
 130 135 140  
 Asp His Arg Ser Thr Ser Glu Lys Gly Thr Val Pro Gly Asp Gly Gln  
 145 150 155 160  
 Thr Lys Glu Gly Ala Val Thr Cys Gln Lys Ser Leu Ser Asn His Ser  
 165 170 175  
 Pro Thr Pro Glu Ser Gly Ser Leu Ser Thr Val Pro Pro Cys Leu Pro  
 180 185 190  
 Ser Glu Asp Ala Ala Asn Leu Arg Pro Trp Glu His Pro Pro Arg Gly  
 195 200 205  
 Ser Ile His Ala Pro Ser Val Lys Ser Ser Gly Asn Lys Gln Pro Trp  
 210 215 220  
 Lys Ser Thr Arg Gln Ser Thr His Val Glu Glu Ile Gly Leu Val Pro  
 225 230 235 240  
 Leu Ala Glu Glu Pro Leu Cys Arg His Val Leu Gln Leu Leu Pro Arg  
 245 250 255  
 Asp Thr Ala Ala  
 260



&lt;210&gt; 3125

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3125

Met Ala Asp Glu Gln Arg Ala Gly Phe Ser Pro Cys Gly Ser Leu Ser

1 5 10 15

Leu Thr Val Leu Gly Gly Cys Phe Leu Ser Cys Cys Pro Trp Glu Ser

20 25 30

Asp Ser Arg Phe Phe Ser Leu Trp Pro Leu Gly Leu Ser Gly Leu Gly

35 40 45

Gly Leu Thr Arg Ser Thr Arg Trp Ala Ser Leu Val Trp Gly Pro Gly

50 55 60

Thr Trp Arg Ser Pro Ala Ala Ser Val Arg Pro Val Leu Gly Val Ala

65 70 75 80

Leu Lys Arg Gln Pro Val Pro Gln Val Ser Ser Leu His Thr Arg Leu

85 90 95

Ile Ala Cys Trp Phe Arg Pro Ser Ala Gly Phe Ser Leu Pro Leu Ser

100 105 110

Asn Ser His Thr Ala Glu Arg Ala Tyr Gly Arg Asp Glu Ala Val His

115 120 125

Ser Lys Asn Ile Leu Ile Leu Arg Ile Thr Ser Pro Pro Gly Ile Thr

130 135 140

Gly Val Leu Lys Lys Cys Cys Asp Thr Ser Glu His Arg Glu Ile His

145 150 155 160

Gly His Phe Gln Ile Met Glu Asp Ser Arg Arg Asn Phe Asn

165 170

&lt;210&gt; 3126

&lt;211&gt; 1075

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3126

Met Glu Gln Pro Arg Lys Glu Val Leu Ala Ser Pro Asp Arg Leu Trp

1 5 10 15

Gly Ser Arg Leu Thr Phe Asn His Asp Gly Ser Ser Arg Tyr Gly Pro

20 25 30

Arg Thr Tyr Gly Thr Thr Thr Ala Pro Arg Asp Glu Asp Gly Ser Thr

35 40 45

Leu Phe Arg Gly Trp Ser Gln Glu Gly Pro Val Lys Ser Pro Ala Glu

50 55 60

Cys Arg Glu Glu His Ser Lys Thr Pro Glu Glu Arg Ser Leu Pro Ser

65 70 75 80

Asp Leu Ala Phe Asn Gly Asp Leu Ala Lys Ala Ala Ser Ser Glu Leu

85 90 95

Pro Ala Asp Ile Ser Lys Pro Trp Ile Pro Ser Ser Pro Ala Pro Ser

100 105 110

Ser Glu Asn Gly Gly Pro Ala Ser Pro Gly Leu Pro Ala Glu Ala Ser

115 120 125

Gly Ser Gly Pro Gly Ser Pro His Leu His Pro Pro Asp Lys Ser Ser

130 135 140

Pro Cys His Ser Gln Leu Leu Glu Ala Gln Ser Pro Glu Ala Ser Gln

145 150 155 160

Ala Ser Pro Cys Pro Ala Val Thr Pro Ser Ala Pro Ser Ala Ala Leu

165	170	175
Pro Asp Glu Gly Ser Arg His Thr	Pro Ser Pro Gly Leu Pro Ala Glu	
180	185	190
Gly Ala Pro Glu Ala Pro Arg Pro Ser Ser Pro Pro Pro Glu Val Leu		
195	200	205
Glu Pro His Ser Leu Asp Gln Pro Pro Ala Thr Ser Pro Arg Pro Leu		
210	215	220
Ile Glu Val Gly Glu Leu Leu Asp Leu Thr Arg Thr Phe Pro Ser Gly		
225	230	235
Gly Glu Glu Glu Ala Lys Gly Asp Ala His Leu Arg Pro Thr Ser Leu		
245	250	255
Val Gln Arg Arg Phe Ser Glu Gly Val Leu Gln Ser Pro Ser Gln Asp		
260	265	270
Gln Glu Lys Leu Gly Gly Ser Leu Ala Ala Leu Pro Gln Gly Gln Gly		
275	280	285
Ser Gln Leu Ala Leu Asp Arg Pro Phe Gly Ala Glu Ser Asn Trp Ser		
290	295	300
Leu Ser Gln Ser Phe Glu Trp Thr Phe Pro Thr Arg Pro Ser Gly Leu		
305	310	315
Gly Val Trp Arg Leu Asp Ser Pro Pro Pro Ser Pro Ile Thr Glu Ala		
325	330	335
Ser Glu Ala Ala Glu Ala Ala Glu Ala Gly Asn Leu Ala Val Ser Ser		
340	345	350
Arg Glu Glu Gly Val Ser Gln Gln Gly Gln Gly Ala Gly Ser Ala Pro		
355	360	365
Ser Gly Ser Gly Ser Ser Trp Val Gln Gly Asp Asp Pro Ser Met Ser		
370	375	380
Leu Thr Gln Lys Gly Asp Gly Glu Ser Gln Pro Gln Phe Pro Ala Val		
385	390	395
		400

Pro Leu Glu Pro Leu Pro Thr Thr Glu Gly Thr Pro Gly Leu Pro Leu  
 405 410 415  
 Gln Gln Ala Glu Glu Arg Tyr Glu Ser Gln Glu Pro Leu Ala Gly Gln  
 420 425 430  
 Glu Ser Pro Leu Pro Leu Ala Thr Arg Glu Ala Ala Leu Pro Ile Leu  
 435 440 445  
 Glu Pro Val Leu Gly Gln Glu Gln Pro Ala Ala Pro Asp Gln Pro Cys  
 450 455 460  
 Val Leu Phe Ala Asp Ala Pro Glu Pro Gly Gln Ala Leu Pro Val Glu  
 465 470 475 480  
 Glu Glu Ala Val Thr Leu Ala Arg Ala Glu Thr Thr Gln Ala Arg Thr  
 485 490 495  
 Glu Ala Gln Asp Leu Cys Arg Ala Ser Pro Glu Pro Pro Gly Pro Glu  
 500 505 510  
 Ser Ser Ser Arg Trp Leu Asp Asp Leu Leu Ala Ser Pro Pro Pro Ser  
 515 520 525  
 Gly Gly Gly Ala Arg Arg Gly Ala Gly Ala Glu Leu Lys Asp Thr Gln  
 530 535 540  
 Ser Pro Ser Thr Cys Ser Glu Gly Leu Leu Gly Trp Ser Gln Lys Asp  
 545 550 555 560  
 Leu Gln Ser Glu Phe Gly Ile Thr Gly Asp Pro Gln Pro Ser Ser Phe  
 565 570 575  
 Ser Pro Ser Ser Trp Cys Gln Gly Ala Ser Gln Asp Tyr Gly Leu Gly  
 580 585 590  
 Gly Ala Ser Pro Arg Gly Asp Pro Gly Leu Gly Glu Arg Asp Trp Thr  
 595 600 605  
 Ser Lys Tyr Gly Gln Gly Ala Gly Glu Gly Ser Thr Arg Glu Trp Ala  
 610 615 620  
 Ser Arg Cys Gly Ile Gly Gln Glu Glu Met Glu Ala Ser Ser Ser Gln

625                      630                      635                      640  
Asp Gln Ser Lys Val Ser Ala Pro Gly Val Leu Thr Ala Gln Asp Arg  
                         645                      650                      655  
Val Val Gly Lys Pro Ala Gln Leu Gly Thr Gln Arg Ser Gln Glu Ala  
                         660                      665                      670  
Asp Val Gln Asp Trp Glu Phe Arg Lys Arg Asp Ser Gln Gly Thr Tyr  
                         675                      680                      685  
Ser Ser Arg Asp Ala Glu Leu Gln Asp Gln Glu Phe Gly Lys Arg Asp  
                         690                      695                      700  
Ser Leu Gly Thr Tyr Ser Ser Arg Asp Val Ser Leu Gly Asp Trp Glu  
705                      710                      715                      720  
Phe Gly Lys Arg Asp Ser Leu Gly Ala Tyr Ala Ser Gln Asp Ala Asn  
                         725                      730                      735  
Glu Gln Gly Gln Asp Leu Gly Lys Arg Asp His His Gly Arg Tyr Ser  
                         740                      745                      750  
Ser Gln Asp Ala Asp Glu Gln Asp Trp Glu Phe Gln Lys Arg Asp Val  
                         755                      760                      765  
Ser Leu Gly Thr Tyr Gly Ser Arg Ala Ala Glu Pro Gln Glu Gln Glu  
770                      775                      780  
Phe Gly Lys Ser Ala Trp Ile Arg Asp Tyr Ser Ser Gly Gly Ser Ser  
785                      790                      795                      800  
Arg Thr Leu Asp Ala Gln Asp Arg Ser Phe Gly Thr Arg Pro Leu Ser  
                         805                      810                      815  
Ser Gly Phe Ser Pro Glu Glu Ala Gln Gln Gln Asp Glu Glu Phe Glu  
                         820                      825                      830  
Lys Lys Ile Pro Ser Val Glu Asp Ser Leu Gly Glu Gly Ser Arg Asp  
                         835                      840                      845  
Ala Gly Arg Pro Gly Glu Arg Gly Ser Gly Gly Leu Phe Ser Pro Ser  
850                      855                      860

Thr Ala His Val Pro Asp Gly Ala Leu Gly Gln Arg Asp Gln Ser Ser  
865 870 875 880  
Trp Gln Asn Ser Asp Ala Ser Gln Glu Val Gly Gly His Gln Glu Arg  
885 890 895  
Gln Gln Ala Gly Ala Gln Gly Pro Gly Ser Ala Asp Leu Glu Asp Gly  
900 905 910  
Glu Met Gly Lys Arg Gly Trp Val Gly Glu Phe Ser Leu Ser Val Gly  
915 920 925  
Pro Gln Arg Glu Ala Ala Phe Ser Pro Gly Gln Gln Asp Trp Ser Arg  
930 935 940  
Asp Phe Cys Ile Glu Ala Ser Glu Arg Ser Tyr Gln Phe Gly Ile Ile  
945 950 955 960  
Gly Asn Asp Arg Val Ser Gly Ala Gly Phe Ser Pro Ser Ser Lys Met  
965 970 975  
Glu Gly Gly His Phe Val Pro Pro Gly Lys Thr Thr Ala Gly Ser Val  
980 985 990  
Asp Trp Thr Asp Gln Leu Gly Leu Arg Asn Leu Glu Val Ser Ser Cys  
995 1000 1005  
Val Gly Ser Gly Gly Ser Ser Glu Ala Arg Glu Ser Ala Val Gly Gln  
1010 1015 1020  
Met Gly Trp Ser Gly Gly Leu Ser Leu Arg Asp Met Asn Leu Thr Gly  
1025 1030 1035 1040  
Cys Leu Glu Ser Gly Gly Ser Glu Glu Pro Gly Gly Ile Gly Val Gly  
1045 1050 1055  
Glu Lys Asp Trp Thr Ser Asp Val Asn Val Lys Ser Lys Asp Phe Ile  
1060 1065 1070  
Thr Ser Gly  
1075

&lt;210&gt; 3127

&lt;211&gt; 952

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3127

Met Met Met Arg Tyr His Gln Ala Ile Gln Ser His Ser Phe Leu Leu

1 5 10 15

Val Gln Phe His Leu Pro Thr Ile Thr Ser Asn Thr Val Cys Arg Ile

20 25 30

Ile Cys Val Lys Val Met Gly Cys Pro Trp Thr Leu Ile Arg Gln Met

35 40 45

Ile Ile Ile Asn Trp Cys Phe His Cys Tyr Leu Asp Ser Gln Met Lys

50 55 60

Trp Thr Leu Leu Leu Thr Tyr Ala Leu Ser Tyr Gln Met Lys Ala Ser

65 70 75 80

Thr Ser Cys Asp Leu Lys Lys Ile Leu Lys Ser Ser Pro Val Pro Ala

85 90 95

Thr Asn Asn Gln Val Pro Thr Ala Met Ser Ser Ser Ser Thr Pro Gln

100 105 110

Ser Gln Gly Pro Pro Pro Thr Val Ser Gln Met Leu Ser Val Lys Arg

115 120 125

Gln Gln Gln Gln Gln His Ser Pro Ala Pro Pro Pro Gln Gln Val Gln

130 135 140

Val Gln Val Gln Gln Pro Gln Gln Val Gln Met Gln Val Gln Pro Gln

145 150 155 160

Gln Ser Asn Ala Gly Val Gly Gln Pro Ala Ser Gly Glu Ser Ser Leu

165 170 175

Ile Lys Gln Leu Leu Leu Pro Lys Arg Gly Pro Ser Thr Pro Gly Gly  
180 185 190  
Lys Leu Ile Leu Pro Ala Pro Gln Ile Pro Pro Pro Asn Asn Ala Arg  
195 200 205  
Ala Pro Ser Pro Gln Val Val Tyr Gln Val Ala Ser Asn Gln Ala Ala  
210 215 220  
Gly Phe Gly Val Gln Gly Gln Thr Pro Ala Gln Gln Leu Leu Val Gly  
225 230 235 240  
Gln Gln Asn Val Gln Leu Val Pro Ser Ala Met Pro Pro Ser Gly Gly  
245 250 255  
Val Gln Thr Val Pro Ile Ser Asn Leu Gln Ile Leu Pro Gly Pro Leu  
260 265 270  
Ile Ser Asn Ser Pro Ala Thr Ile Phe Gln Gly Thr Ser Gly Asn Gln  
275 280 285  
Val Thr Ile Thr Val Val Pro Asn Thr Ser Phe Ala Pro Ala Thr Val  
290 295 300  
Ser Gln Gly Asn Ala Thr Gln Leu Ile Ala Pro Ala Gly Ile Thr Met  
305 310 315 320  
Ser Gly Thr Gln Thr Gly Val Gly Leu Pro Val Gln Thr Leu Pro Ala  
325 330 335  
Thr Gln Ala Ser Pro Ala Gly Gln Ser Ser Cys Thr Thr Ala Thr Pro  
340 345 350  
Pro Phe Lys Gly Asp Lys Ile Ile Cys Gln Lys Glu Glu Glu Ala Lys  
355 360 365  
Glu Ala Thr Gly Leu His Val His Glu Arg Lys Ile Glu Val Met Glu  
370 375 380  
Asn Pro Ser Cys Arg Arg Gly Ala Thr Asn Thr Ser Asn Gly Asp Thr  
385 390 395 400  
Lys Glu Asn Glu Met His Val Gly Ser Leu Leu Asn Gly Arg Lys Tyr



405	410	415
Ser Asp Ser Ser Leu Pro Pro Ser Asn Ser Gly Lys Ile Gln Ser Glu		
420	425	430
Thr Asn Gln Cys Ser Leu Ile Ser Asn Gly Pro Ser Leu Glu Leu Gly		
435	440	445
Glu Asn Gly Ala Ser Gly Lys Gln Asn Ser Glu Gln Ile Asp Met Gln		
450	455	460
Asp Ile Lys Ser Asp Leu Arg Lys Pro Leu Val Asn Gly Ile Cys Asp		
465	470	475
480		
Phe Asp Lys Gly Asp Gly Ser His Leu Ser Lys Asn Ile Pro Asn His		
485	490	495
Lys Thr Ser Asn His Val Gly Asn Gly Glu Ile Ser Pro Met Glu Pro		
500	505	510
Gln Gly Thr Leu Asp Ile Thr Gln Gln Asp Thr Ala Lys Gly Asp Gln		
515	520	525
Leu Glu Arg Ile Ser Asn Gly Pro Val Leu Thr Leu Gly Gly Ser Ser		
530	535	540
Val Ser Ser Ile Gln Glu Ala Ser Asn Ala Ala Thr Gln Gln Phe Ser		
545	550	555
560		
Gly Thr Asp Leu Leu Asn Gly Pro Leu Ala Ser Ser Leu Asn Ser Asp		
565	570	575
Val Pro Gln Gln Arg Pro Ser Val Val Val Ser Pro His Ser Thr Thr		
580	585	590
Ser Val Ile Gln Gly His Gln Ile Ile Ala Val Pro Asp Ser Gly Ser		
595	600	605
Lys Val Ser His Ser Pro Ala Leu Ser Ser Asp Val Arg Ser Thr Asn		
610	615	620
Gly Thr Ala Glu Cys Lys Thr Val Lys Arg Pro Ala Glu Asp Thr Asp		
625	630	635
640		

Arg Glu Thr Val Ala Gly Ile Pro Asn Lys Val Gly Val Arg Ile Val  
645 650 655

Thr Ile Ser Asn Pro Asn Asn Ala Gly Cys Ser Ala Thr Met Val Ala  
660 665 670

Val Pro Ala Gly Ala Asp Pro Ser Thr Val Ala Lys Val Ala Ile Glu  
675 680 685

Ser Ala Val Gln Gln Lys Gln Gln His Pro Pro Thr Tyr Val Gln Asn  
690 695 700

Val Val Pro Gln Asn Thr Pro Met Pro Pro Ser Pro Ala Val Gln Val  
705 710 715 720

Gln Gly Gln Pro Asn Ser Ser Gln Pro Ser Pro Phe Ser Gly Ser Ser  
725 730 735

Gln Pro Gly Asp Pro Met Arg Lys Pro Gly Gln Asn Phe Met Cys Leu  
740 745 750

Trp Gln Ser Cys Lys Lys Trp Phe Gln Thr Pro Ser Gln Val Phe Tyr  
755 760 765

His Ala Ala Thr Glu His Gly Gly Lys Asp Val Tyr Pro Gly Gln Cys  
770 775 780

Leu Trp Glu Gly Cys Glu Pro Phe Gln Arg Gln Arg Phe Ser Phe Ile  
785 790 795 800

Thr His Leu Gln Asp Lys His Cys Ser Lys Asp Ala Leu Leu Ala Gly  
805 810 815

Leu Lys Gln Asp Glu Pro Gly Gln Ala Gly Ser Gln Lys Ser Ser Thr  
820 825 830

Lys Gln Pro Thr Val Gly Gly Thr Ser Ser Thr Pro Arg Ala Gln Lys  
835 840 845

Ala Ile Val Asn His Pro Ser Ala Ala Leu Met Ala Leu Arg Arg Gly  
850 855 860

Ser Arg Asn Leu Val Phe Arg Asp Phe Thr Asp Glu Lys Glu Gly Pro

865                      870                      875                      880  
 Ile Thr Lys His Ile Arg Leu Thr Ala Ala Leu Ile Leu Lys Asn Ile  
                          885                      890                      895  
 Gly Lys Tyr Ser Glu Cys Gly Arg Arg Leu Leu Lys Arg His Glu Asn  
                          900                      905                      910  
 Asn Leu Ser Val Leu Ala Ile Ser Asn Met Glu Ala Ser Ser Thr Leu  
                          915                      920                      925  
 Ala Lys Cys Leu Tyr Glu Leu Asn Phe Thr Val Gln Ser Lys Glu Gln  
                          930                      935                      940  
 Glu Lys Asp Ser Glu Met Leu Gln  
 945                      950

<210> 3128

<211> 209

<212> PRT

<213> Homo sapiens

<400> 3128

Met Ser Asn Leu Lys Pro Asp Gly Glu His Gly Gly Ser Thr Gly Thr  
     1                      5                      10                      15  
 Gly Ser Gly Ala Gly Ser Gly Gly Ala Leu Glu Glu Glu Val Arg Thr  
                          20                      25                      30  
 Leu Phe Val Ser Gly Leu Pro Val Asp Ile Lys Pro Arg Glu Leu Tyr  
                          35                      40                      45  
 Leu Leu Phe Arg Pro Phe Lys Gly Tyr Glu Gly Ser Leu Ile Lys Leu  
                          50                      55                      60  
 Thr Ala Arg Gln Pro Val Gly Phe Val Ile Phe Asp Ser Arg Ala Gly  
                          65                      70                      75                      80

Ala Glu Ala Ala Lys Asn Ala Leu Asn Gly Ile Arg Phe Asp Pro Glu  
                             85                            90                            95  
 Asn Pro Gln Thr Leu Arg Leu Glu Phe Ala Lys Ala Asn Thr Lys Met  
                             100                            105                            110  
 Ala Lys Ser Lys Leu Met Ala Thr Pro Asn Pro Ser Asn Val His Pro  
                             115                            120                            125  
 Ala Leu Gly Ala His Phe Ile Ala Arg Asp Pro Tyr Asp Leu Met Gly  
                             130                            135                            140  
 Ala Ala Leu Ile Pro Ala Ser Pro Glu Ala Trp Ala Pro Tyr Pro Leu  
 145                            150                            155                            160  
 Tyr Thr Thr Glu Leu Thr Pro Ala Ile Ser His Ala Ala Phe Thr Tyr  
                             165                            170                            175  
 Pro Thr Ala Thr Ala Ala Ala Ala Ala Leu His Ala Gln Val Arg Trp  
                             180                            185                            190  
 Tyr Pro Ser Ser Asp Thr Thr Gln Gln Gly Trp Lys Tyr Arg Gln Phe  
                             195                            200                            205  
 Cys

<210> 3129

<211> 404

<212> PRT

<213> Homo sapiens

<400> 3129

Met Ser Pro Arg Phe Val Pro Met Trp Ser Ala Arg Leu Leu Thr Arg  
                             1                            5                            10                            15  
 Ala His Val Glu Cys Pro Pro Ala His Thr Cys Pro Cys Gly Val Pro

20	25	30
Ala Cys Ser Cys Ala His Val Glu Cys Pro Pro Ala His Thr Cys Arg		
35	40	45
Cys Gly Val Pro Thr Cys Ser His Met Pro Met Trp Ser Ala Arg Leu		
50	55	60
Leu Thr Arg Ala His Val Glu Cys Pro Pro Ala His Thr Arg Val His		
65	70	75
Val Glu Cys Pro Pro Ala His Val Pro Met Trp Ser Ala His Leu Leu		
85	90	95
Thr Cys Ala Asp Val Glu Cys Arg Leu Leu Thr His Val Pro Met Trp		
100	105	110
Ser Ala Arg Leu Leu Thr Arg Ala Asp Ala Glu Cys Pro Pro Ala His		
115	120	125
Thr Cys Arg Cys Gly Val Pro Ala Cys Ser His Val Pro Met Arg Ser		
130	135	140
Ala Arg Leu Leu Thr Arg Ala His Ala Glu Cys Pro Pro Ala His Thr		
145	150	155
Cys Arg Arg Gly Val Pro Ala Cys Ser His Val Pro Thr Arg Ser Ala		
165	170	175
Arg Leu Leu Thr Arg Ala Asp Ala Glu Cys Pro Pro Ala His Thr Cys		
180	185	190
Arg Arg Gly Val Pro Ala Cys Ser His Val Pro Met Trp Ser Ala Arg		
195	200	205
Leu Leu Thr Cys Arg Cys Gly Val Pro Ala Cys Ser His Val Pro Met		
210	215	220
Trp Gly Ala Arg Leu Leu Thr Cys Arg Cys Gly Val Pro Ala Cys Ser		
225	230	235
His Val Pro Thr Trp Gly Ala Arg Leu Leu Thr Arg Ala His Val Glu		
245	250	255

Cys Pro Pro Ala His Thr Cys Arg Arg Gly Val Pro Ala Cys Ser Arg  
 260 265 270  
 Ala His Met Glu Cys Pro Pro Ala His Thr Cys His Cys Gly Val Pro  
 275 280 285  
 Ala Cys Ser His Thr Cys Arg Cys Gly Val Pro Ala Cys Ser His Val  
 290 295 300  
 Pro Met Trp Ser Ala Arg Leu Leu Thr Arg Ala His Val Glu Cys Pro  
 305 310 315 320  
 Pro Ala His Thr Arg Ala His Val Glu Cys Pro Pro Ala His Thr Cys  
 325 330 335  
 Pro Cys Gly Val Pro Ala Cys Ser His Thr Cys Pro Cys Gly Val Pro  
 340 345 350  
 Ala Cys Ser His Lys Ala Leu Ala Trp Trp Phe Cys Arg Phe Pro Val  
 355 360 365  
 Leu Pro Ala Glu Ser Asp Ala Val Thr Val His Ser Thr His Gly Gly  
 370 375 380  
 Phe Leu Ile Arg Phe Tyr Val Lys Asp Pro Phe Tyr Ile Ser Leu His  
 385 390 395 400  
 Leu Glu Ile Thr

<210> 3130

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3130

Met Gly Met Leu Ala Phe Pro Pro Asp Thr His Ile Ser Pro Tyr Lys

1 5 10 15  
Asp Leu Leu Asp Pro Ala Arg Trp Arg Met Leu Ile Gln Gln Phe Arg  
20 25 30  
Tyr Asp Asn Tyr Arg Leu His Gln Leu Gly Asn Asn Ser Val Phe Thr  
35 40 45  
Leu Thr Leu Gln Ala Gly Leu Ser Ala Ile Lys Thr Pro Gln Cys Tyr  
50 55 60  
Lys Glu Asp Gly Ser Ser Lys Ser Pro Asp Cys Pro Val Cys Ser Arg  
65 70 75 80  
Ser Leu Asn Lys Leu Ala Gln Pro Leu Pro Met Ala His Cys Ala Asn  
85 90 95  
Ser Arg Leu Val Cys Lys Ile Ser Gly Asp Val Met Asn Glu Asn Asn  
100 105 110  
Pro Pro Met Met Leu Pro Asn Gly Tyr Val Tyr Gly Tyr Asn Ser Leu  
115 120 125  
Leu Ser Ile Arg Gln Asp Asp Lys Val Val Cys Pro Arg Thr Lys Glu  
130 135 140  
Val Phe His Phe Ser Gln Ala Glu Lys Val Tyr Ile Met  
145 150 155

&lt;210&gt; 3131

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3131

Met Phe Ser Gly Ser Ser Lys Ser Pro Met Glu Phe Leu Asn Ser Ser

1 5 10 15

Asp Pro Lys Thr Ala Ser Cys Glu Thr Leu Leu Glu Thr Cys Leu Ser  
                     20                    25                    30  
 Leu Ser Leu Phe Phe Leu Arg Gln Tyr Leu Ala Leu Ser Pro Arg Leu  
                     35                    40                    45  
 Glu Cys Ser Gly Met Ile Leu Ala His Cys Ser Leu Cys Leu Leu Asp  
                     50                    55                    60  
 Ser Arg Asp Phe Ser His Leu Ser Leu Leu Ser Ser Trp Asp Cys Arg  
                     65                    70                    75                    80  
 Cys Ala Ser Pro Ser Pro Ala Lys Phe Phe Cys Arg Asp Met Val Ser  
                     85                    90                    95  
 Thr Phe Cys Pro Gly  
                     100

<210> 3132

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3132

Met Pro Gly Leu Val Leu Phe Pro Gly Leu Phe Pro Leu Phe Gln Phe  
                     1                    5                    10                    15  
 Ser Arg Leu Leu Thr Leu Ala Leu Cys Pro Val Phe His Cys Asp Pro  
                     20                    25                    30  
 Asp Leu Trp Thr Trp Gln Arg Asn Phe Ile Ser Leu Thr Leu Ile Leu  
                     35                    40                    45  
 Gly Ile Ser Leu His Ser Pro Gln Pro His Leu Ile Arg Thr Ser Pro  
                     50                    55                    60  
 Ser Trp Ser Ser Thr Phe Pro Gln Phe Ile Leu Pro Ser Leu Pro Asp



65	70	75	80												
His	Ala	Ile	Pro	Phe	Asp	Lys	Asp	Ile	His	Thr	Gly	Thr	Asp	Leu	Gly
	85		90		95										
Tyr	Leu	Gly	Lys	Glu	Ala	Lys	Glu	Pro	Val	Arg	Ser	Leu			
	100		105												

&lt;210&gt; 3133

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3133

Met	Glu	Pro	Asp	Phe	Leu	His	Ser	Val	Gly	Val	Lys	Leu	Pro	His	Thr
1		5						10					15		
Pro	Pro	Asn	Thr	Cys	Pro	Arg	Ala	Ser	Pro	Ser	His	Pro	Pro	Ser	Gln
		20						25					30		
Gly	Arg	Arg	Asp	Pro	Val	Pro	Val	Glu	Val	Gly	Lys	Pro	Ser	Arg	Val
		35						40					45		
Gln	Lys	Ala	Glu	Ala	Met	Ala	Gln	Ser	Gly	Gly	Ala	Ala	Phe	Trp	Gly
	50					55					60				
Ser	Ala	Leu	Gly	Leu	Gln	Thr	Gln	Gly	Ala	Glu	Met	Leu	Ala	Ala	Gly
65				70				75					80		
Pro	Pro	Thr	Arg	Ala	Arg	Gln	Pro	Ala	Leu	Pro	Gly	Glu	Leu	Arg	Gly
			85					90					95		
Ala	Glu	Val	Pro	Gly	Glu	Ala	Ala	Pro	Gly	Ala	Arg	Ala	Leu	Pro	Asp
		100						105					110		
Leu	Gly	Asn	Arg	Gln	Ser	Gly	Ala	Pro	Gly	Ser	Lys	Ser			
		115						120				125			

&lt;210&gt; 3134

&lt;211&gt; 609

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3134

Met Gln Lys Tyr Glu Glu Gln Lys Lys Tyr Asn Ser Gln Gly Thr Ser  
1 5 10 15  
Thr Asp Met Leu Thr Ile Gly His Lys Tyr Pro Ser Lys Glu Gly Val  
20 25 30  
Lys Lys Arg Gln Gly Leu Ser Ala Lys Pro Gln Gly Gln Gly His Ser  
35 40 45  
Arg Arg Asp Arg His Lys Ala Arg Asn Gln Gly Ser Glu Phe Gln Pro  
50 55 60  
Gly Ser Ile Arg Leu Glu Lys His Pro Lys Leu Pro Ala Thr Gln Pro  
65 70 75 80  
Ile Pro Arg Ile Lys Ser Pro Asn Glu Met Val Gly Gln Lys Pro Leu  
85 90 95  
Gly Glu Ile Thr Thr Val Leu Gly Ser His Leu Ile Tyr Lys Lys Arg  
100 105 110  
Ile Ser Asn Pro Phe Gln Gly Leu Ser His Arg Gly Ser Thr Ile Ser  
115 120 125  
Lys Gly His Lys Ile Gln Lys Thr Ser Asp Leu Lys Pro Ser Gln Thr  
130 135 140  
Gly Pro Lys Glu Lys Pro Phe Gln Lys Pro Arg Ser Leu Asp Ser Ser  
145 150 155 160  
Arg Ile Phe Asp Gly Lys Ala Lys Glu Pro Tyr Ala Glu Gln Pro Asn

165	170	175
Asp Lys Met Glu Ala Glu Ser Ile Tyr Ile Asn Asp Pro Thr Val Lys		
180	185	190
Pro Ile Asn Asp Asp Phe Arg Gly His Leu Phe Ser His Pro Gln Gln		
195	200	205
Ser Met Leu Gln Asn Asp Gly Lys Cys Cys Pro Phe Met Glu Ser Met		
210	215	220
Leu Arg Tyr Asp Val Tyr Gly Gly Glu Asn Glu Val Ile Pro Glu Val		
225	230	235
240		
Leu Arg Lys Ser His Ser His Phe Asp Lys Leu Gly Glu Thr Lys Gln		
245	250	255
Thr Pro His Ser Leu Pro Ser Arg Gly Ala Ser Phe Ser Asp Arg Thr		
260	265	270
Pro Ser Ala Cys Arg Leu Val Asp Asn Thr Ile His Gln Phe Gln Asn		
275	280	285
Leu Gly Leu Leu Asp Tyr Pro Val Gly Val Asn Pro Leu Arg Gln Ala		
290	295	300
Ala Arg Gln Asp Lys Asp Ser Glu Glu Leu Leu Arg Lys Gly Phe Val		
305	310	315
320		
Gln Asp Ala Glu Thr Thr Ser Leu Glu Asn Glu Gln Leu Ser Asn Asp		
325	330	335
Asp Gln Ala Leu Tyr Gln Asn Glu Val Glu Asp Asp Asp Gly Ala Cys		
340	345	350
Ser Ser Leu Tyr Leu Glu Glu Asp Asp Ile Ser Glu Asn Asp Asp Leu		
355	360	365
Arg Gln Met Leu Pro Gly His Ser Gln Tyr Ser Phe Thr Gly Gly Ser		
370	375	380
Gln Gly Asn His Leu Gly Lys Gln Lys Val Ile Glu Arg Ser Leu Thr		
385	390	395
400		

Glu Tyr Asn Ser Thr Met Glu Arg Val Glu Ser Gln Val Leu Lys Arg  
405 410 415  
Asn Glu Cys Tyr Lys Pro Thr Gly Leu His Ala Thr Pro Gly Glu Ser  
420 425 430  
Gln Glu Pro Asn Leu Ser Ala Glu Ser Cys Gly Leu Asn Ser Gly Ala  
435 440 445  
Gln Phe Gly Phe Asn Tyr Glu Glu Glu Pro Ser Val Ala Lys Cys Val  
450 455 460  
Gln Ala Ser Ala Pro Ala Asp Glu Arg Ile Phe Asp Tyr Tyr Ser Ala  
465 470 475 480  
Arg Lys Ala Ser Phe Glu Ala Glu Val Ile Gln Asp Thr Ile Gly Asp  
485 490 495  
Thr Gly Lys Lys Pro Ala Ser Trp Ser Gln Ser Pro Gln Asn Gln Glu  
500 505 510  
Met Arg Lys His Phe Pro Gln Lys Phe Gln Leu Phe Asn Thr Ser His  
515 520 525  
Met Pro Val Leu Ala Gln Asp Val Gln Tyr Glu His Ser His Leu Glu  
530 535 540  
Gly Thr Glu Asn His Ser Met Ala Gly Asp Ser Gly Ile Asp Ser Pro  
545 550 555 560  
Arg Thr Gln Ser Leu Gly Ser Asn Asn Ser Val Ile Leu Asp Gly Leu  
565 570 575  
Lys Arg Arg Gln Asn Phe Leu Gln Asn Val Glu Gly Thr Lys Ser Ser  
580 585 590  
Gln Pro Leu Thr Ser Asn Ser Leu Leu Pro Leu Thr Pro Val Ile Asn  
595 600 605  
Val

&lt;210&gt; 3135

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3135

Met Gly Pro Arg Leu Ala Ala Thr Ala Ala Ala Thr Pro Ala Val

1 5 10 15

Arg Thr Val Pro Gln Tyr Lys Tyr Ala Ala Gly Val Cys Asn Pro Gln

20 25 30

Gln His Leu Asn Ala Gln Pro Gln Val Thr Val Gln Gln Pro Ala Ile

35 40 45

His Val Gln Gly Gln Glu Pro Leu Thr Val Ser Met Leu Ala Ser Ala

50 55 60

Pro Gln Glu Gln Lys Gln Met Leu Gly Glu Trp Leu Phe Pro Leu Ile

65 70 75 80

Gln Ala Met His Pro Thr Leu Ala Gly Lys Ile Thr Gly Val Leu Leu

85 90 95

Glu Ile Asp Asn Ser Glu Leu Leu His Met Leu Lys Ser Pro Glu Ser

100 105 110

Leu His Ser Lys Val Asp Glu Ala Val Ala Val Leu Gln Ala His Gln

115 120 125

Ala Lys Glu Thr Ala Gln Lys Ala Val Asn Ser Ala Thr Gly Val Pro

130 135 140

Thr Val

145

&lt;210&gt; 3136

&lt;211&gt; 803

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3136

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Met Ile Pro Val Thr Glu Phe Arg Gln Phe Ser Glu Gln Gln Pro Ala
  1             5             10             15
Phe Arg Val Leu Lys Pro Trp Trp Asp Val Phe Thr Asp Tyr Leu Ser
             20             25             30
Val Ala Met Leu Met Ile Gly Val Phe Gly Cys Thr Leu Gln Val Met
             35             40             45
Gln Asp Lys Ile Ile Cys Leu Pro Lys Arg Val Gln Pro Ala Gln Asn
             50             55             60
His Ser Ser Leu Ser Asn Val Ser Gln Ala Val Ala Ser Thr Thr Pro
             65             70             75             80
Leu Pro Pro Pro Lys Pro Ser Pro Ala Asn Pro Ile Thr Val Glu Met
             85             90             95
Lys Gly Leu Lys Thr Asp Leu Asp Leu Gln Gln Tyr Ser Phe Ile Asn
             100            105            110
Gln Met Cys Tyr Glu Arg Ala Leu His Trp Tyr Ala Lys Tyr Phe Pro
             115            120            125
Tyr Leu Val Leu Ile His Thr Leu Val Phe Met Leu Cys Ser Asn Phe
             130            135            140
Trp Phe Lys Phe Pro Gly Ser Ser Ser Lys Ile Glu His Phe Ile Ser
             145            150            155            160
Ile Leu Gly Lys Cys Phe Asp Ser Pro Trp Thr Thr Arg Ala Leu Ser
             165            170            175
Glu Val Ser Gly Glu Asp Ser Glu Glu Lys Asp Asn Arg Lys Asn Asn

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180	185	190
Met Asn Arg Ser Asn Thr Ile Gln Ser Gly Pro Glu Gly Ser Leu Val		
195	200	205
Asn Ser Gln Ser Leu Lys Ser Ile Pro Glu Lys Phe Val Val Asp Lys		
210	215	220
Ser Thr Ala Gly Ala Leu Asp Lys Lys Glu Gly Glu Gln Ala Lys Ala		
225	230	235
Leu Phe Glu Lys Val Lys Lys Phe Arg Leu His Val Glu Glu Gly Asp		
245	250	255
Ile Leu Tyr Ala Met Tyr Val Arg Gln Thr Val Leu Lys Val Ile Lys		
260	265	270
Phe Leu Ile Ile Ile Ala Tyr Asn Ser Ala Leu Val Ser Lys Val Gln		
275	280	285
Phe Thr Val Asp Cys Asn Val Asp Ile Gln Asp Met Thr Gly Tyr Lys		
290	295	300
Asn Phe Ser Cys Asn His Thr Met Ala His Leu Phe Ser Lys Leu Ser		
305	310	315
Phe Cys Tyr Leu Cys Phe Val Ser Ile Tyr Gly Leu Thr Cys Leu Tyr		
325	330	335
Thr Leu Tyr Trp Leu Phe Tyr Arg Ser Leu Arg Glu Tyr Ser Phe Glu		
340	345	350
Tyr Val Arg Gln Glu Thr Gly Ile Asp Asp Ile Pro Asp Val Lys Asn		
355	360	365
Asp Phe Ala Phe Met Leu His Met Ile Asp Gln Tyr Asp Pro Leu Tyr		
370	375	380
Ser Lys Arg Phe Ala Val Phe Leu Ser Glu Val Ser Glu Asn Lys Leu		
385	390	395
Lys Gln Leu Asn Leu Asn Asn Glu Trp Thr Pro Asp Lys Leu Arg Gln		
405	410	415

Lys Leu Gln Thr Asn Ala His Asn Arg Leu Glu Leu Pro Leu Ile Met  
420 425 430  
Leu Ser Gly Leu Pro Asp Thr Val Phe Glu Ile Thr Glu Leu Gln Ser  
435 440 445  
Leu Lys Leu Glu Ile Ile Lys Asn Val Met Ile Pro Ala Thr Ile Ala  
450 455 460  
Gln Leu Asp Asn Leu Gln Glu Leu Ser Leu His Gln Cys Ser Val Lys  
465 470 475 480  
Ile His Ser Ala Ala Leu Ser Phe Leu Lys Glu Asn Leu Lys Val Leu  
485 490 495  
Ser Val Lys Phe Asp Asp Met Arg Glu Leu Pro Pro Trp Met Tyr Gly  
500 505 510  
Leu Arg Asn Leu Glu Glu Leu Tyr Leu Val Gly Ser Leu Ser His Asp  
515 520 525  
Ile Ser Arg Asn Val Thr Leu Glu Ser Leu Arg Asp Leu Lys Ser Leu  
530 535 540  
Lys Ile Leu Ser Ile Lys Ser Asn Val Ser Lys Ile Pro Gln Ala Val  
545 550 555 560  
Val Asp Val Ser Ser His Leu Gln Lys Thr Cys Ile His Asn Asp Gly  
565 570 575  
Thr Lys Leu Val Met Leu Asn Asn Leu Lys Lys Met Thr Asn Leu Thr  
580 585 590  
Glu Leu Glu Leu Val His Cys Asp Leu Glu Arg Ile Pro His Ala Val  
595 600 605  
Phe Ser Leu Leu Ser Leu Gln Glu Leu Asp Leu Lys Glu Asn Asn Leu  
610 615 620  
Lys Ser Ile Glu Glu Ile Val Ser Phe Gln His Leu Arg Lys Leu Thr  
625 630 635 640  
Val Leu Lys Leu Trp His Asn Ser Ile Thr Tyr Ile Pro Glu His Ile



645 650 655  
Lys Lys Leu Thr Ser Leu Glu Arg Leu Ser Phe Ser His Asn Lys Ile  
660 665 670  
Glu Val Leu Pro Ser His Leu Phe Leu Cys Asn Lys Ile Arg Tyr Leu  
675 680 685  
Asp Leu Ser Tyr Asn Asp Ile Arg Phe Ile Pro Pro Glu Ile Gly Val  
690 695 700  
Leu Gln Ser Leu Gln Tyr Phe Ser Ile Thr Cys Asn Lys Val Glu Ser  
705 710 715 720  
Leu Pro Asp Glu Leu Tyr Phe Cys Lys Lys Leu Lys Thr Leu Lys Ile  
725 730 735  
Gly Lys Asn Ser Leu Ser Val Leu Ser Pro Lys Ile Gly Asn Leu Leu  
740 745 750  
Phe Leu Ser Tyr Leu Asp Val Lys Gly Asn His Phe Glu Ile Leu Pro  
755 760 765  
Pro Glu Leu Gly Asp Cys Arg Ala Leu Lys Arg Ala Gly Leu Val Val  
770 775 780  
Glu Asp Ala Leu Phe Glu Thr Leu Pro Ser Asp Val Arg Glu Gln Met  
785 790 795 800  
Lys Thr Glu

&lt;210&gt; 3137

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3137

Met Lys Leu Lys Ser Leu Leu Leu Arg Tyr Tyr Pro Pro Gly Ile Met  
 1 5 10 15  
 Leu Glu Tyr Glu Lys His Gly Glu Leu Lys Thr Lys Ser Ile Asp Leu  
 20 25 30  
 Leu Asp Leu Gly Pro Ser Thr Asp Val Ser Ala Leu Val Glu Glu Ile  
 35 40 45  
 Gln Lys Ala Glu Pro Leu Leu Thr Ala Ser Arg Thr Glu Gln Val Lys  
 50 55 60  
 Leu Leu Ile Gln Arg Leu Gln Glu Lys Leu Gly Gln Asn Ser Asn His  
 65 70 75 80  
 Thr Phe Tyr Leu Phe Lys Val Leu Lys Ala His Ile Leu Pro Leu Thr  
 85 90 95  
 Asn Val Ala Leu Asn Lys Ser Gly Ser Cys Phe Ile Thr Gly Ser Tyr  
 100 105 110  
 Asp Arg Thr Cys Lys Leu Trp Asp Ser Ala Ser Gly Glu Glu Leu Asn  
 115 120 125  
 Thr Leu Glu Gly His Arg Asn Val Val Tyr Ala Ile Ala Phe Asn Asn  
 130 135 140  
 Pro Tyr Gly Asp Lys Ile Ala Thr Gly Ser Phe Asp Lys Thr Cys Lys  
 145 150 155 160  
 Leu Trp Ser Val Glu Thr Gly Lys Cys Tyr His Thr Phe Arg Gly His  
 165 170 175  
 Thr Ala Glu Ile Val Cys Leu Ser Phe Asn Pro Gln Ser Thr Leu Val  
 180 185 190  
 Ala Thr Gly Ser Met Asp Thr Thr Ala Lys Leu Trp Asp Ile Gln Asn  
 195 200 205  
 Gly Glu Glu Val Tyr Thr Leu Arg Gly His Ser Ala Glu Ile Ile Ser  
 210 215 220  
 Leu Ser Phe Asn Thr Ser Gly Asp Arg Ile Ile Thr Gly Ser Phe Asp

225                      230                      235                      240  
 His Thr Val Val Val Trp Asp Ala Asp Thr Gly Arg Lys Val Asn Ile  
                          245                      250                      255  
 Leu Ile Gly His Cys Ala Glu Ile Ser Ser Ala Ser Phe Asn Trp Asp  
                          260                      265                      270  
 Cys Ser Leu Ile Leu Thr Gly Ser Met Asp Lys Thr Cys Lys Leu Trp  
                          275                      280                      285  
 Asp Ala Thr Asn Gly Lys Cys Val Ala Thr Leu Thr Gly His Asp Asp  
                          290                      295                      300  
 Glu Ile Leu Asp Ser Cys Phe Asp Tyr Thr Gly Lys Leu Ile Ala Thr  
 305                      310                      315                      320  
 Ala Ser Ala Asp Asp Gly Val Ser Leu Cys Arg Pro Gly Arg Ser Ala  
                          325                      330                      335  
 Val Ala Arg Ser Trp Leu Thr Ala Thr Cys Ala Ser Gln Val Gln Ala  
                          340                      345                      350  
 Ile Leu Leu Pro Gln Pro Pro Glu Leu Cys His Val Leu Gly Asn His  
                          355                      360                      365  
 Val

<210> 3138

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3138

Met Arg Val Ser Arg Gly Trp Gly Leu Gly Thr Lys Ala Leu Pro Arg  
 1                      5                      10                      15

Pro Tyr Ala Pro Trp Gly Phe Trp Leu Cys Lys Gly Val Lys Asp Cys  
                   20                          25                          30  
 Pro Ser Leu Pro Arg Pro Leu Leu Pro Gly Phe Cys Ser Phe Phe Leu  
                   35                          40                          45  
 Ala Val Asn Tyr Ala Lys Gly Ala Gly Lys Gly Arg Val Gly Gly Gly  
                   50                          55                          60  
 Lys Pro Gly Gly Ser Leu Lys Asp Trp Gly Thr Gly Pro Val Arg Lys  
                   65                          70                          75                          80  
 Glu Pro Ser Gln Ser Pro Ser Ala Leu Leu Pro Ala Leu Ser His Gly  
                                   85                          90                          95  
 Val Val Glu Lys Gly Ala Gly Trp Pro Asp Trp Leu Ala Cys Pro Trp  
                   100                          105                          110  
 Gly Gln

&lt;210&gt; 3139

&lt;211&gt; 291

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3139

Met Gly Leu Cys His Phe Ala Thr Leu Ala Leu Ile Leu Leu Val Leu  
           1                          5                          10                          15  
 Leu Glu Ala Leu Ala Gln Ala Asp Thr Gln Lys Met Val Glu Ala Gln  
                   20                          25                          30  
 Arg Gly Val Gly Pro Arg Ala Cys Tyr Ser Ile Trp Leu Leu Leu Ala  
                   35                          40                          45  
 Pro Thr Pro Pro Leu Ser His Cys Leu Gln Ser Pro Gln Lys Gln His

50	55	60
Gln Val Cys Gly Asp Arg Arg Leu Lys Ala Ser Ser Thr Asn Cys Pro		
65	70	75
Ser Glu Lys Cys Thr Ala Trp Ala Arg Tyr Pro His Arg Met Asp Ser		
85	90	95
Leu Gln Lys Gln Asp Leu Arg Arg Pro Lys Ile His Gly Ala Val Gln		
100	105	110
Ala Ser Pro Tyr Gln Pro Pro Thr Leu Ala Ser Leu Gln Arg Leu Leu		
115	120	125
Trp Val Arg Gln Ala Ala Thr Leu Asn His Ile Asp Glu Val Trp Pro		
130	135	140
Ser Leu Phe Leu Gly Asp Ala Tyr Ala Ala Arg Asp Lys Ser Lys Leu		
145	150	155
Ile Gln Leu Gly Ile Thr His Val Val Asn Ala Ala Ala Gly Lys Phe		
165	170	175
Gln Val Asp Thr Gly Ala Lys Phe Tyr Arg Gly Met Ser Leu Glu Tyr		
180	185	190
Tyr Gly Ile Glu Ala Asp Asp Asn Pro Phe Phe Asp Leu Ser Val Tyr		
195	200	205
Phe Leu Pro Val Ala Arg Tyr Ile Arg Ala Ala Leu Ser Val Pro Gln		
210	215	220
Gly Arg Val Leu Val His Cys Ala Met Gly Val Ser Arg Ser Ala Thr		
225	230	235
Leu Val Leu Ala Phe Leu Met Ile Cys Glu Asn Met Thr Leu Val Glu		
245	250	255
Ala Ile Gln Thr Val Gln Ala His Arg Asn Ile Cys Pro Asn Ser Gly		
260	265	270
Phe Leu Arg Gln Leu Gln Val Leu Asp Asn Arg Leu Gly Arg Glu Thr		
275	280	285

Gly Arg Phe

290

&lt;210&gt; 3140

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3140

Met Ser His Ile Trp Ile Leu Ser Leu Val Thr Lys Asn Pro Gly Gly

1

5

10

15

Pro Pro Trp Gly Gln Pro Leu Gly Pro Thr Leu Lys Glu Glu Pro Met

20

25

30

Leu Met Gly Arg Thr Ala Ser Ala Phe Gly Val Trp Glu Thr Ala Asp

35

40

45

Gln Gly Gln Gly Gln Ala Ser Gly Thr Arg Gln Gly Val Leu Gly Met

50

55

60

Met Ala His Leu Gly Gln Ile Val Gly Phe Gly Gly Asp Leu Leu Ala

65

70

75

80

Gly Gly Arg Ser Lys Ala Ala Asp Pro Glu Cys Gln Gly Glu Ser Lys

85

90

95

Leu Gly Cys Gln Pro Ala Gly Ser Gly Thr Gln

100

105

&lt;210&gt; 3141

&lt;211&gt; 112

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3141

Met Leu Ser Ala Pro His Gly Arg Trp Pro Leu Pro Glu Asp Gly Gly  
1 5 10 15  
Arg Gly Asp Val Gly His Ser Arg Leu Phe Phe Leu Pro Leu Gln Cys  
20 25 30  
Leu Phe Gln Leu Tyr Glu Val Lys Thr Ser Leu Ala Gly Ser Arg Glu  
35 40 45  
Thr Asp Leu Cys Arg Trp Phe Lys Gly Arg Ser Ser Arg Val His Ser  
50 55 60  
Ser Gln Gly Cys Gln Ser Gly Leu Cys Arg Lys Leu Asn Ser Leu Lys  
65 70 75 80  
Glu Tyr Met Lys Thr Glu Pro Gln Pro Arg Arg Asn Gly Gln Ile Pro  
85 90 95  
Arg His Ile Lys Glu Phe Leu Asp Lys Leu Ser Lys Leu Asn His Asp  
100 105 110

<210> 3142

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3142

Met Arg Val Pro Arg His Pro Gly Gly Ser His Arg Ser Ala Val Gly  
1 5 10 15  
Leu Leu Cys Glu Lys Gly Pro Ala Ala Pro Ser Leu Val Gln Ile Arg  
20 25 30

Cys Gln Thr Val Phe Leu Gly Ile His Pro Asn Arg Ser Leu Ile Ser  
35 40 45  
Leu Cys Gly Ser Pro Gly Pro Pro Ser Arg Pro Glu Pro Lys Cys Leu  
50 55 60  
Gly Ser Arg Glu Arg Pro Val Pro Phe Phe Ser Ser Leu Ala Thr Ser  
65 70 75 80  
Ser His Phe Arg Leu Leu Thr Val Pro Lys Gln Pro Pro Lys Thr Leu  
85 90 95  
Arg Glu Leu Gly Pro Gly Pro Glu Ala Glu Asn Gly Arg Lys Lys Arg  
100 105 110  
Ser Gly Arg Phe Ile Lys Leu Ser Leu Gln Ile Leu Gln Tyr Arg His  
115 120 125  
Cys Leu Leu Ser Ser Leu Trp Met Val Cys Thr His Pro Cys Leu Gln  
130 135 140  
Val Phe Arg Lys Asn Ala Gln Glu Leu Phe  
145 150

&lt;210&gt; 3143

&lt;211&gt; 468

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3143

Met Glu His Asp Gly Gln Ser Leu Val Lys Ser Thr Ile Phe Ile Ser  
1 5 10 15  
Pro Ser Ser Val Lys Lys Glu Glu Ala Pro Gln Ser Glu Ala Pro Arg  
20 25 30  
Val Glu Glu Cys His His Gly Arg Thr Pro Thr Cys Ser Arg Leu Ala



35	40	45
Pro Pro Pro Met Ser Gln Ser Thr Cys Ser Leu His Ser Ile His Ser		
50	55	60
Glu Trp Gln Glu Arg Pro Leu Cys Glu His Thr Arg Thr Leu Ser Thr		
65	70	75
His Ser Val Pro Asn Ile Ser Gly Ala Thr Cys Ser Ala Phe Ala Ser		
85	90	95
Pro Phe Gly Cys Pro Tyr Ser His Arg His Ala Thr Tyr Pro Tyr Arg		
100	105	110
Val Cys Ser Val Asn Pro Pro Ser Ala Ile Glu Met Gln Leu Arg Arg		
115	120	125
Val Leu His Asp Ile Arg Asn Ser Leu Gln Asn Leu Ser Gln Tyr Pro		
130	135	140
Met Met Arg Gly Pro Asp Pro Ala Ala Ala Pro Tyr Ser Thr Gln Lys		
145	150	155
Ser Ser Val Leu Pro Leu Tyr Glu Asn Thr Phe Gln Glu Leu Gln Val		
165	170	175
Met Arg Arg Ser Leu Asn Leu Phe Arg Thr Gln Met Met Asp Leu Glu		
180	185	190
Leu Ala Met Leu Arg Gln Gln Thr Met Val Tyr His His Met Thr Glu		
195	200	205
Glu Glu Arg Phe Glu Val Asp Gln Leu Gln Gly Leu Arg Asn Ser Val		
210	215	220
Arg Met Glu Leu Gln Asp Leu Glu Leu Gln Leu Glu Glu Arg Leu Leu		
225	230	235
Gly Leu Glu Glu Gln Leu Arg Ala Val Arg Met Pro Ser Pro Phe Arg		
245	250	255
Ser Ser Ala Leu Met Gly Met Cys Gly Ser Arg Ser Ala Asp Asn Leu		
260	265	270

Ser Cys Pro Ser Pro Leu Asn Val Thr Glu Leu Met Gln Glu Gln Ser  
 275 280 285

Tyr Leu Lys Ser Glu Leu Gly Leu Gly Leu Gly Glu Met Gly Phe Glu  
 290 295 300

Ile Pro Pro Gly Glu Ser Ser Glu Ser Val Phe Ser Gln Ala Thr Ser  
 305 310 315 320

Glu Ser Ser Ser Val Cys Ser Gly Pro Ser His Ala Asn Arg Arg Thr  
 325 330 335

Gly Val Pro Ser Thr Ala Ser Val Gly Lys Ser Lys Thr Pro Leu Val  
 340 345 350

Ala Arg Lys Lys Val Phe Arg Ala Ser Val Ala Leu Thr Pro Thr Ala  
 355 360 365

Pro Ser Arg Thr Gly Ser Val Gln Thr Pro Pro Asp Leu Glu Ser Ser  
 370 375 380

Glu Glu Val Asp Ala Ala Glu Gly Ala Pro Glu Val Val Gly Pro Lys  
 385 390 395 400

Ser Glu Val Glu Glu Gly His Gly Lys Leu Pro Ser Met Pro Ala Ala  
 405 410 415

Glu Glu Met His Lys Asn Val Glu Gln Asp Glu Leu Gln Gln Val Ile  
 420 425 430

Arg Glu Ile Lys Glu Ser Ile Val Gly Glu Ile Arg Arg Glu Ile Val  
 435 440 445

Ser Gly Leu Leu Ala Ala Val Ser Ser Ser Lys Ala Ser Asn Ser Lys  
 450 455 460

Gln Asp Tyr His  
 465

<210> 3144

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3144

Met Gly Arg Val Ser Gly Leu Val Pro Ser Arg Phe Leu Thr Leu Leu

1 5 10 15

Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Val Arg Pro

20 25 30

Thr Ala Ala Leu Asn Pro Ser Pro Phe Pro Ser Leu Ser Gly Pro Ser

35 40 45

Pro Thr Leu Pro Pro Pro Ser Val Leu Pro Ser Trp Val Phe Leu Phe

50 55 60

Pro Ala Ala Pro Arg Pro Ala Leu Gln Pro Ala Pro Phe Ser Leu Leu

65 70 75 80

Ser Ala Gly Trp Trp Pro Arg Ser Leu Ser Pro Trp Ala Ser Leu Gln

85 90 95

Trp Ser Trp Pro Val Ser Ser Gln Glu Ser Pro Cys Ser Thr Ala Pro

100 105 110

Arg Ala Ser Ser Val Ser Phe Leu Pro Ala His Leu Ser His Thr Thr

115 120 125

His Phe Tyr Gln Asp Ser Leu Gln Pro Pro Asp Thr Ile Val Ser Ala

130 135 140

Val Ala Asn Pro Ser Ser Ser Lys Ile Phe Asn Asp Val Leu Asn Pro

145 150 155 160

Ala Val Tyr

&lt;210&gt; 3145

&lt;211&gt; 650

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3145

Met Thr Met Arg Glu Arg Asn Gln Ile Phe His Glu Val Pro Leu Lys

1 5 10 15

Phe Met Met Ser Lys Asn Thr Ser Val Pro Val Ser Ala Val Phe Met

20 25 30

Asp Lys Pro Glu Glu Phe Ile Ser Glu Met Asp Met Ser Cys Glu Val

35 40 45

Asn Glu Cys Arg Lys Ile Glu Ser Leu Glu Asn Leu Tyr Leu Asp Phe

50 55 60

Asp Asp Asp Val Thr Glu Leu Glu Thr Phe Gly Val Thr Thr Thr Lys

65 70 75 80

Val Ser Lys Ser Pro Ser Pro Ala Ser Thr Ser Thr Val Pro Asn Met

85 90 95

Thr Asp Ala Pro Thr Ala Pro Lys Ala Gly Thr Thr Thr Val Ala Pro

100 105 110

Ser Ala Pro Asp Ile Ser Ala Asn Ser Arg Ser Leu Ser Gln Ile Leu

115 120 125

Met Glu Gln Leu Gln Lys Glu Lys Gln Leu Val Thr Gly Met Asp Gly

130 135 140

Gly Pro Glu Glu Cys Lys Asn Lys Asp Asp Gln Gly Phe Glu Ser Cys

145 150 155 160

Glu Lys Val Ser Asn Ser Asp Lys Pro Leu Ile Gln Asp Ser Asp Leu

165 170 175

Lys Thr Ser Asp Ala Leu Gln Leu Glu Asn Ser Gln Glu Ile Glu Thr

180	185	190
Ser Asn Lys Asn Asp Met Thr Ile Asp Ile Leu His Ala Asp Gly Glu		
195	200	205
Arg Pro Asn Val Leu Glu Asn Leu Asp Asn Ser Lys Glu Lys Thr Val		
210	215	220
Gly Ser Glu Ala Ala Lys Thr Glu Asp Thr Val Leu Cys Ser Ser Asp		
225	230	235
Thr Asp Glu Glu Cys Leu Ile Ile Asp Thr Glu Cys Lys Asn Asn Ser		
245	250	255
Asp Gly Lys Thr Ala Val Val Gly Ser Asn Leu Ser Ser Arg Pro Ala		
260	265	270
Ser Pro Asn Ser Ser Ser Gly Gln Ala Ser Val Gly Asn Gln Thr Asn		
275	280	285
Thr Ala Cys Ser Pro Glu Glu Ser Cys Val Leu Lys Lys Pro Ile Lys		
290	295	300
Arg Val Tyr Lys Lys Phe Asp Pro Val Gly Glu Ile Leu Lys Met Gln		
305	310	315
Asp Glu Leu Leu Lys Pro Ile Ser Arg Lys Val Pro Glu Leu Pro Leu		
325	330	335
Met Asn Leu Glu Asn Ser Lys Gln Pro Ser Val Ser Glu Gln Leu Ser		
340	345	350
Gly Pro Ser Asp Ser Ser Ser Trp Pro Lys Ser Gly Trp Pro Ser Ala		
355	360	365
Phe Gln Lys Pro Lys Gly Arg Leu Pro Tyr Glu Leu Gln Asp Tyr Val		
370	375	380
Glu Asp Thr Ser Glu Tyr Leu Ala Pro Gln Glu Gly Asn Phe Val Tyr		
385	390	395
Lys Leu Phe Ser Leu Gln Asp Leu Leu Leu Leu Val Arg Cys Ser Val		
405	410	415

Gln Arg Ile Glu Thr Arg Pro Arg Ser Lys Lys Arg Lys Lys Ile Arg  
420 425 430  
Arg Gln Phe Pro Val Tyr Val Leu Pro Lys Val Glu Tyr Gln Ala Cys  
435 440 445  
Tyr Gly Val Glu Ala Leu Thr Glu Ser Glu Leu Cys Arg Leu Trp Thr  
450 455 460  
Glu Ser Leu Leu His Ser Asn Ser Ser Phe Tyr Val Gly His Ile Asp  
465 470 475 480  
Ala Phe Thr Ser Lys Leu Phe Leu Leu Glu Glu Ile Thr Ser Glu Glu  
485 490 495  
Leu Lys Glu Lys Leu Ser Ala Leu Lys Ile Ser Asn Leu Phe Asn Ile  
500 505 510  
Leu Gln His Ile Leu Lys Lys Leu Ser Ser Leu Gln Glu Gly Ser Tyr  
515 520 525  
Leu Leu Ser His Ala Ala Glu Asp Ser Ser Leu Leu Ile Tyr Lys Ala  
530 535 540  
Ser Asp Gly Lys Val Thr Arg Thr Ala Tyr Asn Leu Tyr Lys Thr His  
545 550 555 560  
Cys Gly Leu Pro Gly Val Pro Ser Ser Leu Ser Val Pro Trp Val Pro  
565 570 575  
Leu Asp Pro Ser Leu Leu Leu Pro Tyr His Ile His His Gly Arg Ile  
580 585 590  
Pro Cys Thr Phe Pro Pro Lys Ser Leu Asp Thr Thr Thr Gln Gln Lys  
595 600 605  
Ile Gly Gly Thr Arg Met Pro Thr Arg Ser His Arg Asn Pro Val Ser  
610 615 620  
Met Glu Thr Lys Ser Ser Cys Leu Pro Ala Gln Gln Val Glu Thr Glu  
625 630 635 640  
Gly Val Ala Pro His Lys Arg Lys Ile Thr

645

650

&lt;210&gt; 3146

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3146

Met Ser Pro Thr Thr Gly Pro Gln Pro Asn Pro Arg Ala Trp Glu Cys

1

5

10

15

His His Thr Thr Gly Pro Gln Pro Asn Pro Arg Ala Trp Glu Cys His

20

25

30

Arg Met Lys Gly Pro Gln Pro Asn Pro Arg Ala Trp Glu Cys His Leu

35

40

45

Arg Arg Val His Asn Leu Thr Pro Glu Pro Gly Asn Val Thr Ile Arg

50

55

60

Gly Val His Ile Leu Thr Pro Glu Pro Gly Asn Val Thr Ile Arg Gly

65

70

75

80

Val His Asn Leu Thr Pro Glu Pro Gly Asn Val Thr Glu Arg Gly Val

85

90

95

His Asn Leu Thr Pro Glu Pro Gly Asn Val Thr Glu Arg Gly Val His

100

105

110

Asn Leu Ile Pro Glu Pro Gly Asn Val Thr Val Lys Arg Gly Pro Gln

115

120

125

Pro Asn Pro Arg Ala Trp Glu Cys His Arg Thr Arg Gly Pro Gln Pro

130

135

140

Asn Pro Arg Ala Trp Glu Cys His Arg Thr Arg Gly Pro Gln Pro Asn

145

150

155

160

Pro Arg Ala Trp Glu Cys His Arg

165

<210> 3147

<211> 625

<212> PRT

<213> Homo sapiens

<400> 3147

Met Ser Gly Leu Val Leu Gly Gln Arg Asp Glu Pro Ala Gly His Arg

1 5 10 15

Leu Ser Gln Glu Glu Ile Leu Gly Ser Thr Arg Leu Val Ser Gln Gly

20 25 30

Leu Glu Ala Leu Arg Ser Glu His Gln Ala Val Leu Gln Ser Leu Ser

35 40 45

Gln Thr Ile Glu Cys Leu Gln Thr Ile Glu Cys Leu Gln Gln Gly Gly

50 55 60

His Glu Glu Gly Leu Val His Glu Lys Ala Arg Gln Leu Arg Arg Ser

65 70 75 80

Met Glu Asn Ile Glu Leu Gly Leu Ser Glu Ala Gln Val Met Leu Ala

85 90 95

Leu Ala Ser His Leu Ser Thr Val Glu Ser Glu Lys Gln Lys Leu Arg

100 105 110

Ala Gln Val Arg Arg Leu Cys Gln Glu Asn Gln Trp Leu Arg Asp Glu

115 120 125

Leu Ala Gly Thr Gln Gln Arg Leu Gln Arg Ser Glu Gln Ala Val Ala

130 135 140

Gln Leu Glu Glu Glu Lys Lys His Leu Glu Phe Leu Gly Gln Leu Arg



145                      150                      155                      160  
Gln Tyr Asp Glu Asp Gly His Thr Ser Glu Glu Lys Glu Gly Asp Ala  
                         165                      170                      175  
Thr Lys Asp Ser Leu Asp Asp Leu Phe Pro Asn Glu Glu Glu Glu Asp  
                         180                      185                      190  
Pro Ser Asn Gly Leu Ser Arg Gly Gln Gly Ala Thr Ala Ala Gln Gln  
                         195                      200                      205  
Gly Gly Tyr Glu Ile Pro Ala Arg Leu Arg Thr Leu His Asn Leu Val  
                         210                      215                      220  
Ile Gln Tyr Ala Ala Gln Gly Arg Tyr Glu Val Ala Val Pro Leu Cys  
225                      230                      235                      240  
Lys Gln Ala Leu Glu Asp Leu Glu Arg Thr Ser Gly Arg Gly His Pro  
                         245                      250                      255  
Asp Val Ala Thr Met Leu Asn Ile Leu Ala Leu Val Tyr Arg Asp Gln  
                         260                      265                      270  
Asn Lys Tyr Lys Glu Ala Ala His Leu Leu Asn Asp Ala Leu Ser Ile  
                         275                      280                      285  
Arg Glu Ser Thr Leu Gly Pro Asp His Pro Ala Val Ala Ala Thr Leu  
                         290                      295                      300  
Asn Asn Leu Ala Val Leu Tyr Gly Lys Arg Gly Lys Tyr Lys Glu Ala  
305                      310                      315                      320  
Glu Pro Leu Cys Gln Arg Ala Leu Glu Ile Arg Glu Lys Val Leu Gly  
                         325                      330                      335  
Thr Asn His Pro Asp Val Ala Lys Gln Leu Asn Asn Leu Ala Leu Leu  
                         340                      345                      350  
Cys Gln Asn Gln Gly Lys Tyr Glu Ala Val Glu Arg Tyr Tyr Gln Arg  
                         355                      360                      365  
Ala Leu Ala Ile Tyr Glu Gly Gln Leu Gly Pro Asp Asn Pro Asn Val  
                         370                      375                      380

Ala Arg Thr Lys Asn Asn Leu Ala Ser Cys Tyr Leu Lys Gln Gly Lys  
385 390 395 400  
Tyr Ala Glu Ala Glu Thr Leu Tyr Lys Glu Ile Leu Thr Arg Ala His  
405 410 415  
Val Gln Glu Phe Gly Ser Val Asp Asp Asp His Lys Pro Ile Trp Met  
420 425 430  
His Ala Glu Glu Arg Glu Glu Met Ser Lys Ser Arg His His Glu Gly  
435 440 445  
Gly Thr Pro Tyr Ala Glu Tyr Gly Gly Trp Tyr Lys Ala Cys Lys Val  
450 455 460  
Ser Ser Pro Thr Val Asn Thr Thr Leu Arg Asn Leu Gly Ala Leu Tyr  
465 470 475 480  
Arg Arg Gln Gly Lys Leu Glu Ala Ala Glu Thr Leu Glu Glu Cys Ala  
485 490 495  
Leu Arg Ser Arg Arg Gln Gly Thr Asp Pro Ile Ser Gln Thr Lys Val  
500 505 510  
Ala Glu Leu Leu Gly Glu Ser Asp Gly Arg Arg Thr Ser Gln Glu Gly  
515 520 525  
Pro Gly Asp Ser Val Lys Phe Glu Gly Gly Glu Asp Ala Ser Val Ala  
530 535 540  
Val Glu Trp Ser Gly Asp Gly Ser Gly Thr Leu Gln Arg Ser Gly Ser  
545 550 555 560  
Leu Gly Lys Ile Arg Asp Val Leu Arg Arg Ser Ser Glu Leu Leu Val  
565 570 575  
Arg Lys Leu Gln Gly Thr Glu Pro Arg Pro Ser Ser Ser Asn Met Lys  
580 585 590  
Arg Ala Ala Ser Leu Asn Tyr Leu Asn Gln Pro Ser Ala Ala Pro Leu  
595 600 605  
Gln Val Ser Arg Gly Leu Ser Ala Ser Thr Met Asp Leu Ser Ser Ser

610                                  615                                  620  
Ser  
625

<210> 3148

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3148

Met Arg Pro Val Pro Cys His Leu Phe Cys Thr Thr Leu Arg Arg Met  
1                                  5                                  10                                  15  
Trp Gly Ser Thr Glu Asp Trp Leu Ser Thr Ile Glu Asp Ile Lys Val  
                                20                                  25                                  30  
Lys His Thr Ala Lys Ala Glu Asn Met Ile Gln Leu Gln Phe Arg Met  
                                35                                  40                                  45  
Glu Gln Met Val Phe Cys Gln Asp Gln Ile Tyr Ser Val Val Leu Lys  
                                50                                  55                                  60  
Lys Val Arg Glu Glu Ile Phe Asn Pro Leu Gly Thr Pro Ser Gln Asn  
65                                  70                                  75                                  80  
Met Lys Leu Asn Ser His Phe Pro Ser Asn Glu Ser Ser Val Ser Ser  
                                85                                  90                                  95  
Phe Thr Glu Ile Gly Ile His Leu Asn Ala Tyr Phe Leu Glu Thr Ser  
                                100                                  105                                  110  
Lys Arg Leu Ala Asn Gln Ile Pro Phe Ile Ile Gln Tyr Phe Met Leu  
                                115                                  120                                  125  
Arg Glu Asn Gly Asp Ser Leu Gln Lys Ala Met Met Gln Ile Leu Gln  
130                                  135                                  140

Glu Lys Asn Arg Tyr Ser Trp Leu Leu Gln Glu Gln Ser Glu Thr Ala  
 145                      150                      155                      160  
 Thr Lys Arg Arg Ile Leu Lys Glu Arg Ile Tyr Arg Leu Thr Gln Ala  
                     165                      170                      175  
 Arg His Ala Leu Cys Gln Phe Ser Ser Lys Glu Ile His  
                     180                      185

<210> 3149

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3149

Met Ala Glu Lys Ile Ile Glu Ile Leu Glu Ser Gly His Leu Arg Lys  
 1                      5                      10                      15  
 Leu Asp His Ile Ser Glu Ser Val Pro Val Leu Glu Leu Phe Ser Asn  
                     20                      25                      30  
 Ile Trp Gly Ala Gly Thr Lys Thr Ala Gln Met Trp Tyr Gln Gln Gly  
                     35                      40                      45  
 Phe Arg Ser Leu Glu Asp Ile Arg Ser Gln Ala Ser Leu Thr Thr Gln  
                     50                      55                      60  
 Gln Ala Ile Gly Leu Lys His Tyr Ser Asp Phe Leu Glu Arg Met Pro  
 65                      70                      75                      80  
 Arg Glu Glu Ala Thr Glu Ile Glu Gln Thr Val Gln Lys Ala Ala Gln  
                     85                      90                      95  
 Ala Phe Asn Ser Gly Leu Leu Cys Val Ala Cys Gly Ser Tyr Arg Arg  
                     100                      105                      110  
 Gly Lys Ala Thr Cys Gly Asp Val Asp Val Leu Ile Thr His Pro Asp

115	120	125
Gly Trp Ser His Arg Gly Ile Phe Ser Arg Leu Leu Asp Ser Leu Arg		
130	135	140
Gln Glu Gly Phe Leu Thr Asp Asp Leu Val Ser Gln Glu Glu Asn Gly		
145	150	155
Gln Gln Gln Lys Tyr Leu Gly Val Cys Arg Leu Pro Gly Pro Gly Arg		
165	170	175
Arg His Arg Arg Leu Asp Ile Ile Val Val Pro Tyr Ser Glu Phe Ala		
180	185	190
Cys Ala Leu Leu Tyr Phe Thr Gly Ser Ala His Phe Asn Arg Ser Met		
195	200	205
Arg Ala Leu Ala Lys Thr Lys Gly Met Ser Leu Ser Glu His Ala Leu		
210	215	220
Ser Thr Ala Val Val Arg Asn Thr His Gly Cys Lys Val Gly Pro Gly		
225	230	235
Arg Val Leu Pro Thr Pro Thr Glu Lys Asp Val Phe Arg Leu Leu Gly		
245	250	255
Leu Pro Tyr Arg Glu Pro Ala Glu Arg Asp Trp		
260	265	

&lt;210&gt; 3150

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3150

Met	Leu	Trp	Pro	Cys	Leu	Cys	His	Gly	His	Leu	Leu	Gln	Pro	Arg	Ser
1				5				10					15		

Ile Lys Glu Ala Gly Glu Gly Thr Val Ala Val Lys Thr Phe Gly Ser  
                     20                    25                    30  
 Arg Gly Thr Gly Ile Leu Thr Ala Trp Asp Lys Glu Ala Gly Gly Val  
                     35                    40                    45  
 Val Val Lys Ala Gln Ala Trp Asp His Thr Ala Gly Ala Gln Ile Pro  
                     50                    55                    60  
 Asp Leu Gln Gln Cys Gly Cys Asp Asp Pro Gly Trp Ala Arg Trp Leu  
                     65                    70                    75                    80  
 Lys Pro Pro Ser Leu Arg Phe Ala Ser Leu Ala Val His Thr Gln Gly  
                                     85                    90                    95  
 Met His Arg Leu Pro Arg His Pro Gly His Pro Leu Gln Val Ala Ser  
                     100                    105                    110  
 Gly Leu Pro Ser Thr Glu Gly Cys Ser Ala Ala Cys Lys Pro Thr Asp  
                     115                    120                    125  
 Ser Gln Ser Pro Asp Ser Asp Ala Lys Thr Ser Arg Ser Gly Ala Asn  
                     130                    135                    140  
 Ile Arg Ala Gly Glu Leu Ser Gln Trp His Ala Ser His  
                     145                    150                    155

<210> 3151

<211> 270

<212> PRT

<213> Homo sapiens

<400> 3151

Met Ile Glu Glu Met Tyr Gln Leu Tyr Gly Gly Pro Val Val Leu Val  
                     1                    5                    10                    15  
 Ala His Ser Met Gly Asn Met Tyr Thr Leu Tyr Phe Leu Gln Arg Gln

20 25 30  
Pro Gln Ala Trp Lys Asp Lys Tyr Ile Arg Ala Phe Val Ser Leu Gly  
35 40 45  
Ala Pro Trp Gly Gly Val Ala Lys Thr Leu Arg Val Leu Ala Ser Gly  
50 55 60  
Asp Asn Asn Arg Ile Pro Val Ile Gly Pro Leu Lys Ile Arg Glu Gln  
65 70 75 80  
Gln Arg Ser Ala Val Ser Thr Ser Trp Leu Leu Pro Tyr Asn Tyr Thr  
85 90 95  
Trp Ser Pro Glu Lys Val Phe Val Gln Thr Pro Thr Ile Asn Tyr Thr  
100 105 110  
Leu Arg Asp Tyr Arg Lys Phe Phe Gln Asp Ile Gly Phe Glu Asp Gly  
115 120 125  
Trp Leu Met Arg Gln Asp Thr Glu Gly Leu Val Glu Ala Thr Met Pro  
130 135 140  
Pro Gly Val His Leu His Cys Leu Tyr Gly Thr Gly Val Pro Thr Pro  
145 150 155 160  
Asp Ser Phe Tyr Tyr Glu Ser Phe Pro Asp Arg Asp Pro Lys Ile Cys  
165 170 175  
Phe Gly Asp Gly Asp Gly Thr Val Asn Leu Lys Ser Ala Leu Gln Cys  
180 185 190  
Gln Ala Trp Gln Ser Arg Gln Glu His Gln Val Leu Leu Gln Arg Ala  
195 200 205  
His Arg Asp Ala Gly Gln Arg His His Pro Gly Leu Ser Glu Thr Cys  
210 215 220  
Ala Pro Trp Ala Leu Thr Pro Val Pro Gln Asp Ser Cys Gly Ser Ala  
225 230 235 240  
Val Asp Leu Leu Leu Ala Ser Gly Ala Val Met Ala His Ala Phe Cys  
245 250 255

Lys Val Cys Asp Ser Pro Phe Lys Ala Pro Ser Leu Gly Leu  
 260 265 270

<210> 3152

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3152

Met Asp Ala Glu Leu Phe Leu Met Asp Glu Gln Ile Ser Asp Phe Phe  
 1 5 10 15  
 Phe Phe Pro Phe Phe Phe Leu Arg Trp Ser Leu Ala Leu Ser Pro Arg  
 20 25 30  
 Leu Glu Cys Ser Asp Val Ile Ser Ala His Cys Asn Leu Asn Leu Pro  
 35 40 45  
 Ser Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Ile Thr  
 50 55 60  
 Gly Val His His His Asp Trp Leu Ile Phe Val Phe Leu Val Glu Thr  
 65 70 75 80  
 Gly Phe His His Ala Asp Gln Ala Gly Leu Gly Leu Leu Thr Ser Ser  
 85 90 95  
 Asp Pro Pro Gly Leu Thr Ser Gln Ser Ala Gly Ile Thr Gly Val Ser  
 100 105 110  
 His His Ala Gln Pro Leu Phe Phe Phe Phe Phe Leu Asn Arg Asp Arg  
 115 120 125  
 Val Ser Leu Cys Cys Pro Gly Trp Gln Ser Trp Leu Thr Ala Thr Leu  
 130 135 140  
 Thr Ser



145

&lt;210&gt; 3153

&lt;211&gt; 640

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3153

Met Glu Asn Gln Leu Ala Lys Ser Thr Glu Glu Arg Thr Phe Gln Tyr

1 5 10 15

Gln Asp Ser Leu Pro Ser Leu Pro Val Pro Ser Leu Glu Glu Ser Leu

20 25 30

Lys Lys Tyr Leu Glu Ser Val Thr Arg Thr Cys Tyr Gln Ile Arg Gly

35 40 45

Leu Asp Pro Asp Ala Lys Arg Gly Phe Leu Asp Leu Thr Arg Glu Gly

50 55 60

Ile Gln Val Lys Pro Phe Ala Asn Gln Glu Glu Tyr Lys Lys Thr Glu

65 70 75 80

Glu Ile Val Gln Lys Phe Gln Ser Gly Ile Gly Glu Lys Leu His Gln

85 90 95

Lys Leu Leu Glu Arg Ala Lys Gly Lys Arg Asn Trp Leu Glu Glu Trp

100 105 110

Trp Leu Asn Val Ala Tyr Leu Asp Val Arg Ile Pro Ser Gln Leu Asn

115 120 125

Val Asn Phe Ala Gly Pro Ala Ala His Phe Glu His Tyr Trp Pro Pro

130 135 140

Lys Glu Gly Thr Gln Leu Glu Arg Gly Ser Ile Thr Leu Trp His Asn

145 150 155 160

Leu Asn Tyr Trp Gln Leu Leu Arg Lys Glu Lys Val Pro Val His Lys  
 165 170 175  
 Val Gly Asn Thr Pro Leu Asp Met Asn Gln Phe Arg Met Leu Phe Ser  
 180 185 190  
 Thr Cys Lys Val Pro Gly Ile Thr Arg Asp Ser Ile Met Asn Tyr Phe  
 195 200 205  
 Arg Thr Glu Ser Glu Gly Arg Ser Pro Asn His Ile Val Val Leu Cys  
 210 215 220  
 Arg Gly Arg Ala Phe Val Phe Asp Val Ile His Glu Gly Cys Leu Val  
 225 230 235 240  
 Thr Pro Pro Glu Leu Leu Arg Gln Leu Thr Tyr Ile His Lys Lys Cys  
 245 250 255  
 His Ser Glu Pro Asp Gly Pro Gly Ile Ala Ala Leu Thr Ser Glu Glu  
 260 265 270  
 Arg Thr Arg Trp Ala Lys Ala Arg Glu Tyr Leu Ile Gly Leu Asp Pro  
 275 280 285  
 Glu Asn Leu Ala Leu Leu Glu Lys Ile Gln Ser Ser Leu Leu Val Tyr  
 290 295 300  
 Ser Met Glu Asp Ser Ser Pro His Val Thr Pro Glu Asp Tyr Ser Glu  
 305 310 315 320  
 Ile Ile Ala Ala Ile Leu Ile Gly Asp Pro Thr Val Arg Trp Gly Asp  
 325 330 335  
 Lys Ser Tyr Asn Leu Ile Ser Phe Ser Asn Gly Val Phe Gly Cys Asn  
 340 345 350  
 Cys Asp His Ala Pro Phe Asp Ala Met Ile Met Val Asn Ile Ser Tyr  
 355 360 365  
 Tyr Val Asp Glu Lys Ile Phe Gln Asn Glu Gly Arg Trp Lys Gly Ser  
 370 375 380  
 Glu Lys Val Arg Asp Ile Pro Leu Pro Glu Glu Leu Ile Phe Ile Val

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Phe Cys Ala Phe His Asp Met Ile Gln Leu Met Asn Ser Thr His Leu  
 625                                  630                                  635                                  640

<210> 3154

<211> 363

<212> PRT

<213> Homo sapiens

<400> 3154

Met Glu Pro Lys Pro Gln Lys Ser Pro Gly Lys Gln Phe Thr Phe Ser  
 1                                  5                                  10                                  15  
 Tyr Glu Asn Glu Val Cys Lys Gln Asp Tyr Phe Ile Lys Ser Pro Pro  
                                 20                                  25                                  30  
 Ser Gln Leu Phe Ser Ser Val Thr Ser Trp Lys Lys Arg Phe Phe Ile  
                                 35                                  40                                  45  
 Leu Ser Lys Ala Gly Glu Lys Ser Phe Ser Leu Ser Tyr Tyr Lys Asp  
                                 50                                  55                                  60  
 His His His Arg Gly Ser Ile Glu Ile Asp Gln Asn Ser Ser Val Glu  
 65                                  70                                  75                                  80  
 Val Gly Ile Ser Ser Gln Glu Lys Met Gln Ser Val Gln Lys Met Phe  
                                 85                                  90                                  95  
 Lys Cys His Pro Asp Glu Val Met Ser Ile Arg Thr Thr Asn Arg Glu  
                                 100                                  105                                  110  
 Tyr Phe Leu Ile Gly His Asp Arg Glu Lys Ile Lys Asp Trp Val Ser  
                                 115                                  120                                  125  
 Phe Met Ser Ser Phe Arg Gln Asp Ile Lys Ala Thr Gln Gln Asn Thr  
                                 130                                  135                                  140  
 Glu Glu Glu Leu Ser Leu Gly Asn Lys Arg Thr Leu Phe Tyr Ser Ser

145                      150                      155                      160  
Pro Leu Leu Gly Pro Ser Ser Thr Ser Glu Ala Val Gly Ser Ser Ser  
                         165                      170                      175  
Pro Arg Asn Gly Leu Gln Asp Lys His Leu Met Glu Gln Ser Ser Pro  
                         180                      185                      190  
Gly Phe Arg Gln Thr His Leu Gln Asp Leu Ser Glu Ala Thr Gln Asp  
                         195                      200                      205  
Val Lys Glu Glu Asn His Tyr Leu Thr Pro Arg Ser Val Leu Leu Glu  
                         210                      215                      220  
Leu Asp Asn Ile Ile Ala Ser Ser Asp Ser Gly Glu Ser Ile Glu Thr  
225                      230                      235                      240  
Asp Gly Pro Asp Gln Val Ser Gly Arg Ile Glu Cys His Tyr Glu Pro  
                         245                      250                      255  
Met Glu Ser Tyr Phe Phe Lys Glu Thr Ser His Glu Ser Val Asp Ser  
                         260                      265                      270  
Ser Lys Glu Glu Pro Gln Thr Leu Pro Glu Thr Gln Asp Gly Asp Leu  
                         275                      280                      285  
His Leu Gln Glu Gln Gly Ser Gly Ile Asp Trp Cys Leu Ser Pro Ala  
                         290                      295                      300  
Asp Val Glu Ala Gln Thr Thr Asn Asp Gln Lys Gly Ser Ala Ser Leu  
305                      310                      315                      320  
Thr Val Val Gln Leu Ser Ile Leu Ile Asn Asn Ile Pro Asp Glu Ser  
                         325                      330                      335  
Gln Val Glu Lys Leu Asn Val Phe Leu Ser Pro Pro Asp Val Ile Asn  
                         340                      345                      350  
Tyr Leu Ala Leu Thr Glu Ala Thr Gly Arg Ile  
                         355                      360

&lt;210&gt; 3155

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3155

Met Trp Glu Gly Ala Ala Phe Ala Arg Gly Asn Gly Gly Gly Leu Phe

1 5 10 15

Cys Val Val Leu Gly Gly Ala Val Ala His Leu Arg Glu Thr Ala Gly

20 25 30

Leu Gly Arg Ala Lys Ala Trp Lys Gly Gly Trp Asn Gly Phe Leu Val

35 40 45

Phe Ser Arg Val Pro Ser Ala Gly Phe Phe Ala Ser Ala Gln Val Pro

50 55 60

Gln Gly Pro Gly Ala Leu Arg Arg Ser Arg Gly Gly Cys Val Ser Gly

65 70 75 80

Val Glu Ser Phe Val Thr Gln Lys Ile Gly Glu Glu Trp Gly Arg Gly

85 90 95

Gly Gly Gly Glu Gly Arg Gln Glu Leu Ala Ala Ala Arg Trp Ala Leu

100 105 110

Glu Ile Glu Val Gly Arg Gly Gly Glu Val Arg Glu Pro Ala Arg Pro

115 120 125

Phe Leu Leu Leu Ala Cys Pro Arg Leu Ser Leu Cys Gly Met Leu Ala

130 135 140

Gly Ser Pro Ala Leu Phe Phe Trp Gly Gly Gly Val Ile Ala Gly Cys

145 150 155 160

Gly Ser Val Phe Val Leu Val Thr Val Ile Gln Glu Ser Ala Ile Gly

165 170 175

Lys Thr Pro Gly Leu Gly Gly Lys

180

&lt;210&gt; 3156

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3156

Met Thr Thr Asn Asp Glu Gly Ser Val Tyr Lys Asp Gln Ser Leu Asp

1 5 10 15

Gly Ser Phe Lys Asn Ser Leu Lys Ile Gln Gly Asn His Pro Ala Arg

20 25 30

Met Leu Ile Ser Arg His Asp Gly Ser Thr Val Ser Pro Ser Phe Gly

35 40 45

Ile Pro Lys Pro Lys Glu Glu Val Arg Gly Arg Ile Val Val Ile Leu

50 55 60

Ser Leu Arg Leu Gln Glu Lys Leu Tyr Thr Gly Gly Arg Ile Phe Tyr

65 70 75 80

His Phe Gly Met Leu Pro Lys Lys Trp Asp Thr Lys Gly Val Asn Phe

85 90 95

Arg Ser Leu Glu Val Ala Lys Leu Glu Gly Asp Leu Trp Arg His Ala

100 105 110

Gly Cys Glu Val Ser Cys Pro Met Lys Arg Lys

115 120

&lt;210&gt; 3157

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3157

Met Phe Pro Ile Glu Ala Gly Ala Ile Asn Pro Glu Asn Arg Ile Ile  
1 5 10 15  
Pro His Leu Pro Ala Pro Lys Trp Phe Asp Gly Gln Arg Ala Ala Glu  
20 25 30  
Asn Arg Gln Gly Thr Leu Thr Glu Tyr Cys Ser Thr Leu Met Ser Leu  
35 40 45  
Pro Thr Lys Ile Ser Arg Cys Pro His Leu Leu Asp Phe Phe Lys Val  
50 55 60  
Arg Pro Asp Asp Leu Lys Leu Pro Thr Asp Asn Gln Thr Lys Lys Pro  
65 70 75 80  
Glu Thr Tyr Leu Met Pro Lys Asp Gly Lys Ser Thr Ala Thr Asp Ile  
85 90 95  
Thr Gly Pro Ile Ile Leu Gln Thr Tyr Arg Ala Ile Ala Asn Tyr Glu  
100 105 110  
Lys Thr Ser Gly Ser Glu Met Ala Leu Ser Thr Gly Asp Val Val Glu  
115 120 125  
Val Val Glu Lys Ser Glu Ser Gly Gln Thr Ser His Leu Thr Gly Leu  
130 135 140  
Leu Pro Leu Val Leu Arg Asn Pro Gln Pro Gln Ala Pro Cys Gln Gly  
145 150 155 160  
Ser Gly Ser Leu Ala Pro Gly Arg Thr Pro Ala Leu Leu Gly Ala Leu  
165 170 175  
Asn Val Leu Pro Thr Leu Trp Val Ala Phe Cys Leu Ser Val His Pro  
180 185 190  
Val Val Ala Val Gly Ile Cys Ala Trp Gln Ala Gly Ala Gly His Val



195	200	205
Cys Val Phe Cys Leu Asp Gly Tyr Gly Thr Val Cys Ser Leu		
210	215	220

&lt;210&gt; 3158

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3158

Met	Leu	Pro	Leu	His	Ser	Val	Ser	Pro	Ser	Ala	Pro	Ser	Cys	Ser	Thr
1				5						10				15	
Gln	Val	Tyr	Glu	Gln	Thr	Pro	Gln	Cys	Ala	Leu	Lys	Ala	Leu	Gly	Asp
			20					25					30		
Leu	Ala	Leu	Ala	Thr	Ser	Pro	Ala	Ser	Pro	Leu	Ile	Phe	Phe	Pro	Leu
			35					40					45		
Pro	Arg	Leu	Ser	Leu	Ser	Cys	Ala	Gln	Leu	Leu	Val	Ala	Ser	Leu	Val
		50				55					60				
Phe	Pro	Thr	Thr	Leu	Pro	Leu	Val	Ile	Asn	Ser	Trp	Leu	Pro	Gly	Lys
		65				70					75			80	
Gln	Ala	Ser	Pro	Cys	Pro	Ser	Arg	Phe	Ile	Ser	Asn	Glu	Met	Ser	Phe
				85					90					95	
Met	Thr	Met	Thr	His	Met	Thr	Val	Pro	Pro	Cys	Ser	Phe	Pro	Tyr	Pro
				100					105					110	
Ile	Leu	Gly	Trp	Phe	Thr	His	Ser	Leu	Val	Leu	Pro	Pro	Tyr	Pro	Leu
				115					120					125	
His	Thr	Trp	Lys	Pro	Leu	Glu	His	Phe	Ile	Ala	Leu	Val	Ile	Tyr	Thr
				130					135					140	

Ser Leu Ser Leu Asp

145

<210> 3159

<211> 549

<212> PRT

<213> Homo sapiens

<400> 3159

Met Pro Val Asp Leu Gly Gln Ala Leu Gly Leu Leu Pro Ser Leu Ala

1 5 10 15

Lys Ala Glu Asp Ser Gln Phe Ser Glu Ser Asp Ala Ala Leu Gln Glu

20 25 30

Glu Leu Ser Ser Pro Glu Thr Ala Arg Gln Leu Phe Arg Gln Phe Arg

35 40 45

Tyr Gln Val Met Ser Gly Pro His Glu Thr Leu Lys Gln Leu Arg Lys

50 55 60

Leu Cys Phe Gln Trp Leu Gln Pro Glu Val His Thr Lys Glu Gln Ile

65 70 75 80

Leu Glu Ile Leu Met Leu Glu Gln Phe Leu Thr Ile Leu Pro Gly Glu

85 90 95

Ile Gln Met Trp Val Arg Lys Gln Cys Pro Gly Ser Gly Glu Glu Ala

100 105 110

Val Thr Leu Val Glu Ser Leu Lys Gly Asp Pro Gln Arg Leu Trp Gln

115 120 125

Trp Ile Ser Ile Gln Val Leu Gly Gln Asp Ile Leu Ser Glu Lys Met

130 135 140

Glu Ser Pro Ser Cys Gln Val Gly Glu Val Glu Pro His Leu Glu Val

145                      150                      155                      160  
Val Pro Gln Glu Leu Gly Leu Glu Asn Ser Ser Ser Gly Pro Gly Glu  
                         165                      170                      175  
Leu Leu Ser His Ile Val Lys Glu Glu Ser Asp Thr Glu Ala Glu Leu  
                         180                      185                      190  
Ala Leu Ala Ala Ser Gln Pro Ala Arg Leu Glu Glu Arg Leu Ile Arg  
                         195                      200                      205  
Asp Gln Asp Leu Gly Ala Ser Leu Leu Ser Ala Ala Pro Gln Glu Gln  
                         210                      215                      220  
Trp Arg Gln Leu Asp Ser Thr Gln Lys Glu Gln Tyr Trp Asp Leu Met  
225                      230                      235                      240  
Leu Glu Thr Tyr Gly Lys Met Val Ser Gly Ala Gly Ile Ser His Pro  
                         245                      250                      255  
Lys Ser Asp Leu Thr Asn Ser Ile Glu Phe Gly Glu Glu Leu Ala Gly  
                         260                      265                      270  
Ile Tyr Leu His Val Asn Glu Lys Ile Pro Arg Pro Thr Cys Ile Gly  
                         275                      280                      285  
Asp Arg Gln Glu Asn Asp Lys Glu Asn Leu Asn Leu Glu Asn His Arg  
                         290                      295                      300  
Asp Gln Glu Leu Leu His Ala Ser Cys Gln Ala Ser Gly Glu Val Pro  
305                      310                      315                      320  
Ser Gln Ala Ser Leu Arg Gly Phe Phe Thr Glu Asp Glu Pro Gly Cys  
                         325                      330                      335  
Phe Gly Glu Gly Glu Asn Leu Pro Glu Ala Leu Gln Asn Ile Gln Asp  
                         340                      345                      350  
Glu Gly Thr Gly Glu Gln Leu Ser Pro Gln Glu Arg Ile Ser Glu Lys  
                         355                      360                      365  
Gln Leu Gly Gln His Leu Pro Asn Pro His Ser Gly Glu Met Ser Thr  
                         370                      375                      380

Met Trp Leu Glu Glu Lys Arg Glu Thr Ser Gln Lys Gly Gln Pro Arg  
385 390 395 400  
Ala Pro Met Ala Gln Lys Leu Pro Thr Cys Arg Glu Cys Gly Lys Thr  
405 410 415  
Phe Tyr Arg Asn Ser Gln Leu Ile Phe His Gln Arg Thr His Thr Gly  
420 425 430  
Glu Thr Tyr Phe Gln Cys Thr Ile Cys Lys Lys Ala Phe Leu Arg Ser  
435 440 445  
Ser Asp Phe Val Lys His Gln Arg Thr His Thr Gly Glu Lys Pro Cys  
450 455 460  
Lys Cys Asp Tyr Cys Gly Lys Gly Phe Ser Asp Phe Ser Gly Leu Arg  
465 470 475 480  
His His Glu Lys Ile His Thr Gly Glu Glu Pro Tyr Lys Cys Pro Ile  
485 490 495  
Cys Glu Lys Ser Phe Ile Gln Arg Ser Asn Phe Asn Arg His Gln Arg  
500 505 510  
Val His Thr Gly Glu Lys Pro Tyr Lys Cys Ser His Cys Gly Lys Ser  
515 520 525  
Phe Ser Trp Ser Ser Ser Leu Asp Lys His Gln Arg Ser His Leu Gly  
530 535 540  
Lys Lys Pro Phe Gln  
545

&lt;210&gt; 3160

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3160

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Thr Leu Asn Val Asn  
 1 5 10 15  
 Gly Leu Asn Ala Pro Ile Lys Arg His Arg Leu Ala Asp Trp Ile Lys  
 20 25 30  
 Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu Thr His Leu Lys Cys  
 35 40 45  
 Arg Asp Thr His Arg Leu Lys Ile Lys Gly Trp Arg Lys Ile Tyr Gln  
 50 55 60  
 Thr Asn Gly Lys Gln Lys Lys Ala Gly Ile Thr Ile Leu Val Ser Asp  
 65 70 75 80  
 Lys Thr Asp Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Glu Gly His  
 85 90 95  
 Tyr Ile Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Ile Leu  
 100 105 110  
 Asn Ile Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Lys Gln Val  
 115 120 125  
 Leu Arg Asp Gln Glu Glu Thr  
 130 135

&lt;210&gt; 3161

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3161

Met Asn Ala Ile Val Ala Leu Cys His Phe Cys Glu Leu His Gly Pro  
 1 5 10 15

Arg Thr Leu Phe Cys Thr Glu Val Leu His Ala Pro Leu Pro Gln Gly  
                     20                    25                    30  
 Asp Gly Asn Glu Asp Ser Pro Gly Gln Gly Glu Gln Ala Glu Glu Glu  
                     35                    40                    45  
 Glu Gly Gly Ile Gln Met Asn Ser Arg Met Arg Ala His Ser Pro Ala  
                     50                    55                    60  
 Glu Gly Ala Ser Val Glu Ser Ser Ser Pro Gly Pro Lys Lys Ser Asp  
                     65                    70                    75                    80  
 Met Cys Glu Gly Cys Arg Ser Leu Ala Ala Gly His Pro Gly Tyr Ile  
                     85                    90                    95  
 Ser His Asp Lys Glu Thr Ser Ile Lys Tyr Val Ser His Gln His Pro  
                     100                    105                    110  
 Ser His Pro Gln Leu Phe Ser Ile Val Arg Gln Ala Cys Val Arg Ser  
                     115                    120                    125  
 Leu Ser Cys Glu Val Ser Leu Val Ala Thr Glu Pro Val Ser Val Gly  
                     130                    135                    140  
 Ala His Met Leu Pro Gly Ala Leu Gly Gly Leu Gly Ala Ser Ile Ala  
                     145                    150                    155                    160  
 Gln Gly Gly Arg His Trp Ser Ser Leu Arg Ala Asp Pro Gln Ile Ser  
                     165                    170                    175  
 Thr Ala Gln Gly Thr Gly Arg Leu Pro Cys Pro Glu Leu Arg Glu Glu  
                     180                    185                    190  
 Ser Cys Trp Thr Cys  
                     195

&lt;210&gt; 3162

&lt;211&gt; 124

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3162

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Met Pro Met Ile His His Ser Thr Cys Phe Pro Gly Cys Asn Pro Leu
  1             5             10             15
Gln Phe Pro Asn Lys Leu Leu Leu Trp Arg Ser Cys Leu Ser Leu Ser
          20             25             30
Leu Phe Arg Leu Thr Pro Phe Met Ser Cys Ile Ala Val Asp Asp Thr
          35             40             45
His Ile Cys Thr Ser Cys Leu Asn Val Pro Ser Pro Asn Ser Lys Ile
          50             55             60
Pro Leu Ser Val Tyr Pro Val Pro Leu Phe Glu Pro Leu Arg Gly Ile
          65             70             75             80
Ser Asp Leu Lys Cys Pro Lys Leu Ser Pro Cys Asp Ala Pro Arg Ala
          85             90             95
Ala Pro Pro His His Leu Leu Leu Ser Asn Gly Ser Leu Ile Leu Leu
          100            105            110
Trp Ala Leu Phe Ser Pro Pro Thr Leu Glu Leu Ser
          115            120

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<210> 3163

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3163

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Met Gln Thr Pro Ser Gln Pro Leu Pro Thr Tyr Asp Glu Val Leu Leu
  1             5             10             15

```

Cys Thr Pro Ala Thr Thr Phe Glu Glu Val Ala Leu Leu Leu Arg Arg  
20 25 30  
Cys Leu Thr Leu Gly Ser Leu Gly His Lys Val Tyr Ser Leu Leu Phe  
35 40 45  
Ala Asp Gln Leu Ser Tyr Glu Val Ala Arg Gln Ala Glu Glu Leu Phe  
50 55 60  
His Asn Leu Cys Thr Gln Gln His Arg Glu Asp Tyr Gln Leu Val Met  
65 70 75 80  
Val Cys Asp Gly Asp Trp Glu His Cys Tyr Leu Pro Ser Ala Phe Ser  
85 90 95  
Gln His Lys Val Phe Val Thr Pro Gln Ala Pro Leu Glu Ala Ile Gln  
100 105 110  
Ala Tyr Leu Ala Gly His Tyr Arg Val Pro Lys Gln Thr Leu Ser Ala  
115 120 125  
Ala Ala Val Phe Asn Asp Arg Leu Cys Val Gly Ile Val Ala Ser Glu  
130 135 140  
Arg Ala Gly Val Gly Lys Glu Ser Gly Arg Val Gly Arg Pro Arg Leu  
145 150 155 160  
Pro Gly Thr Ala Arg Gly Pro Ser Pro Leu Gln Gln Met Lys Pro Val  
165 170 175  
Cys Arg Trp Arg Asn Arg Gly Ser Gly Arg Val  
180 185

&lt;210&gt; 3164

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 3164

Met Thr Ser Met Val Ala Lys Leu Ala Leu Ser Cys Gln Thr Met Ala

1 5 10 15

Phe Ser Phe Leu Asn Lys Pro Leu Arg Lys Met Leu Arg Phe Ser Trp

20 25 30

Leu Met Trp Leu Arg Lys Arg Lys Pro Cys Pro Arg Pro Trp Tyr Pro

35 40 45

Val Leu Asn Leu Pro Ala Glu Gln Thr Lys Asp Lys Cys Glu Met Asn

50 55 60

Thr Val Ile Val Pro Arg Ala Thr Lys Ser Thr Glu Gln Ile His Tyr

65 70 75 80

Lys Val Thr Leu Val Phe Phe Val Lys Phe Lys Tyr Arg His Leu Glu

85 90 95

Phe Pro Glu Ile Ser Asn Ala Val Leu Gly Ala Ser Leu Val Asp Ile

100 105 110

Leu Leu Ser Phe Leu Asn Lys Lys Asn Ile Ser Ser Leu Gln Gln

115 120 125

&lt;210&gt; 3165

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3165

Met Gly Phe Ile Val Gln Thr Phe Leu Gly Asn Val Thr Leu Ile Glu

1 5 10 15

Arg Ser Gln Ser Arg Pro Gly Ala Val Ala His Ala Cys Asn Pro Ser

20 25 30

Thr Leu Gly Gly Gln Val Gly Trp Ile Thr Arg Ser Gly Asp Arg Tyr  
 35 40 45  
 His Gly Glu Thr Pro Ser Leu Leu Lys Met Gln Lys Lys Leu Ala Gly  
 50 55 60  
 Arg Gly Gly Gly Arg Leu Trp Ser Gln Gln Leu Gly Arg Leu Arg Arg  
 65 70 75 80  
 Glu Asn Gly Val Asn Pro Gly Gly Gly Ala Cys Ser Glu Pro Arg Ser  
 85 90 95  
 Arg His Cys Thr Pro Ala Trp Ala Thr Glu Gln Asp Ser Val Leu Lys  
 100 105 110  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Ala Ser Arg Lys Asp His  
 115 120 125  
 Ala Leu Tyr Asp Pro Phe Arg  
 130 135

<210> 3166

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3166

Met Trp Leu Gln Cys Phe Ser Leu His Pro Val Pro Pro Arg Ala Leu  
 1 5 10 15  
 Thr Gly Phe Arg Cys Gly Cys Ile Arg Gly Thr Cys Ser Trp Asp Ser  
 20 25 30  
 Ser Cys Leu Trp Glu Gln Asp Gln Gly Ser Trp Glu Ser Pro Trp Thr  
 35 40 45  
 Trp Cys Tyr Pro Leu Val Leu Gly Ser Arg Glu Cys Phe Pro Ala Gln

50                      55                      60  
 Gly Ser Arg Gly Ala Gly Met Arg Leu Arg Gln Pro Asp Arg Gly Lys  
 65                      70                      75                      80  
 Leu Gln Gly Glu Glu Cys Leu Phe Thr Lys Ile Ser Asn Thr Val Cys  
                          85                      90                      95  
 Pro Phe Pro Phe Arg Thr Pro Tyr Leu Met Pro Ser Ala Ser Lys Tyr  
                          100                      105                      110  
 Pro

<210> 3167

<211> 229

<212> PRT

<213> Homo sapiens

<400> 3167

Met Gly Cys Leu Ala Leu Ser Trp Gly His Glu Ala Trp Phe Ala Lys  
 1                      5                      10                      15  
 Trp Glu Pro Arg Asp Met Cys Ser Lys Arg His Ile Gln Gly Leu Gln  
                          20                      25                      30  
 Ser Ile Ser Lys Gly Pro Phe Leu Leu Ser Ala Met Leu Leu Arg Lys  
                          35                      40                      45  
 Ala Met Asn His Val Pro Gln Glu Ser Trp Glu Asn Pro Arg Ala Trp  
                          50                      55                      60  
 Glu Leu Val Thr Asp Pro His Ser Glu Arg Ser Leu His Ser Tyr Thr  
 65                      70                      75                      80  
 Ala Thr Pro Pro Pro Pro Ala His Gln Asp Gly Ser Ala Ala Ala Lys  
                          85                      90                      95

Gly Glu Cys Leu Val Pro Lys Ala Gly Pro Ser Ser Met Val Leu Leu  
                   100                          105                          110  
 Ala Ser Leu Ser Ser Val Ser Leu Arg Asp Pro Val Ala Thr Ala Pro  
                   115                          120                          125  
 Ser Val Leu Pro Arg Val Ala Val Pro Thr Ser Gly Cys Glu Glu Pro  
                   130                          135                          140  
 Ala Trp His Ser Cys Val Ser Ala Gly Arg Pro Cys Leu Lys Gln Thr  
                   145                          150                          155                          160  
 Ala Ile Gln Arg Gly Ile Pro Gly Phe His Gly Asn Cys Ser Cys Pro  
                                   165                          170                          175  
 Val Phe Arg Pro Gln Leu Gly Leu Gly Ser Ser Cys Cys Val Met Gly  
                   180                          185                          190  
 Asp Pro Leu Val Tyr Arg Gln Pro Gln Gly Pro Gly His Gly Ala Ser  
                   195                          200                          205  
 Phe Pro Cys Leu Gly Pro Glu Ile Trp Glu Ala His Arg Gly Arg Cys  
                   210                          215                          220  
 Phe Pro Gln Pro His  
 225

&lt;210&gt; 3168

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3168

Met Asp Leu Leu His Lys Asn Met Lys His Leu Trp Phe Phe Leu Leu  
           1                          5                          10                          15  
 Leu Val Ala Ala Pro Arg Trp Val Leu Ser Gln Val Gln Val Gln Gln

20	25	30
Ser Gly Ala Arg Leu Leu Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys		
35	40	45
Asn Val Tyr Gly Gly Ser Phe Ala Gly Phe Thr Trp Met Trp Ile Arg		
50	55	60
Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Gly Glu Ile Asp His Arg		
65	70	75
Gly Arg Ser Asn Asn Ser Pro Ser Leu Glu Ser Arg Val Thr Leu Ser		
85	90	95
Gly Asp Ile Phe Lys Lys Glu Phe Ser Leu Lys Leu Thr Ser Leu Thr		
100	105	110
Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Arg Gly Thr Val		
115	120	125
Thr Thr Ala Ile Pro Phe Asp Phe Trp Gly Gln Gly Thr Pro Val Thr		
130	135	140
Val Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu		
145	150	155
Cys Ser Thr Gln Pro Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln		
165	170	175
Gly Phe Phe Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly		
180	185	190
Gln Gly Val Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly		
195	200	205
Asp Leu Tyr Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys		
210	215	220
Leu Ala Gly Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro		
225	230	235
Ser Gln Asp Val Thr Val Pro Cys Pro Val Pro Ser Thr Pro Pro Thr		
245	250	255

Pro Ser Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser Cys Cys His Pro  
260 265 270  
Arg Leu Ser Leu His Arg Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser  
275 280 285  
Glu Ala Asn Leu Thr Cys Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly  
290 295 300  
Val Thr Phe Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala Val Gln Gly  
305 310 315 320  
Pro Pro Glu Arg Asp Leu Cys Gly Cys Tyr Ser Val Ser Ser Val Leu  
325 330 335  
Pro Gly Cys Ala Glu Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr  
340 345 350  
Ala Ala Tyr Pro Glu Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys  
355 360 365  
Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser  
370 375 380  
Glu Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg  
385 390 395 400  
Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln  
405 410 415  
Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro  
420 425 430  
Ser Gln Gly Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala  
435 440 445  
Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His  
450 455 460  
Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala  
465 470 475 480  
Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp

485

490

495

Gly Thr Cys Tyr

500

&lt;210&gt; 3169

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3169

Met Asp Ser Leu Ala Ala Gly Glu Leu Asn Ala Ser His Gln Pro Trp

1

5

10

15

Val Pro Glu Phe Val Ala Tyr Trp Arg Lys Thr His Gln Asp His Leu

20

25

30

Cys Ser Leu His Ser Arg Ala Phe Gly Leu Leu Asp Ala Arg Val Thr

35

40

45

Trp Ala Leu Arg Arg Ala Pro Glu Pro Val Pro Gly Lys Asp Arg Leu

50

55

60

Leu Leu Ala Ala Phe Pro Ala Glu Ala Ser Pro Val Asp Thr Ala Ser

65

70

75

80

Val Ser Val Tyr Gly Arg Ala Pro Arg Tyr Met His Lys Gly Val Lys

85

90

95

Lys Cys Val Cys Thr Pro Val Ser Lys Asn Ser Thr Ala Trp Leu Leu

100

105

110

Leu Gly Gly Ile Ser

115

&lt;210&gt; 3170

&lt;211&gt; 488

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3170

Met Phe Ala Ala Gly Leu Ala Pro Phe Tyr Ala Ser Asn Phe Ser Leu

1 5 10 15

Trp Ser Ala Ala Tyr Cys Ser Ser Ala Gly Pro Gly Gly Cys Ser Phe

20 25 30

Pro Leu Asp Pro Ala Ala Val Lys Lys Pro Ser Phe Cys Ile Ala Asp

35 40 45

Ile Leu His Ala Gly Val Gly Asp Leu Gly Ala Ala Pro Glu Gly Leu

50 55 60

Ala Gly Ala Ser Ala Ala Ala Leu Thr Ala His Leu Gly Ser Val His

65 70 75 80

Pro His Ala Ser Phe Gln Ala Ala Ala Arg Ser Pro Leu Arg Pro Thr

85 90 95

Pro Val Val Ala Pro Ser Glu Val Pro Ala Gly Phe Pro Gln Arg Leu

100 105 110

Ser Pro Leu Ser Ala Ala Tyr His His His His Pro Gln Gln Gln Gln

115 120 125

Gln Gln Gln Gln Pro Gln Gln Gln Gln Pro Pro Pro Pro Pro Arg Ala

130 135 140

Gly Ala Leu Gln Pro Pro Ala Ser Gly Thr Arg Val Val Pro Asn Pro

145 150 155 160

His His Ser Gly Ser Ala Pro Ala Pro Ser Ser Lys Asp Leu Lys Phe

165 170 175

Gly Ile Asp Arg Ile Leu Ser Ala Glu Phe Asp Pro Lys Val Lys Glu



180 185 190  
Gly Asn Thr Leu Arg Asp Leu Thr Ser Leu Leu Thr Gly Gly Arg Pro  
195 200 205  
Ala Gly Val His Leu Ser Gly Leu Gln Pro Ser Ala Gly Gln Phe Phe  
210 215 220  
Ala Ser Leu Asp Pro Ile Asn Glu Ala Ser Ala Ile Leu Ser Pro Leu  
225 230 235 240  
Asn Ser Asn Pro Arg Asn Ser Val Gln His Gln Phe Gln Asp Thr Phe  
245 250 255  
Pro Gly Pro Tyr Ala Val Leu Thr Lys Asp Thr Met Pro Gln Thr Tyr  
260 265 270  
Lys Arg Lys Arg Ser Trp Ser Arg Ala Val Phe Ser Asn Leu Gln Arg  
275 280 285  
Lys Gly Leu Glu Lys Arg Phe Glu Ile Gln Lys Tyr Val Thr Lys Pro  
290 295 300  
Asp Arg Lys Gln Leu Ala Ala Met Leu Gly Leu Thr Asp Ala Gln Val  
305 310 315 320  
Lys Val Trp Phe Gln Asn Arg Arg Met Lys Trp Arg His Ser Lys Glu  
325 330 335  
Ala Gln Ala Gln Lys Asp Lys Asp Lys Glu Ala Gly Glu Lys Pro Ser  
340 345 350  
Gly Gly Ala Pro Ala Ala Asp Gly Glu Gln Asp Glu Arg Ser Pro Ser  
355 360 365  
Arg Ser Glu Gly Glu Ala Glu Ser Glu Ser Ser Asp Ser Glu Ser Leu  
370 375 380  
Asp Met Ala Pro Ser Asp Thr Glu Arg Thr Glu Gly Ser Glu Arg Ser  
385 390 395 400  
Leu His Gln Thr Thr Val Thr Lys Ala Pro Val Thr Gly Ala Leu Ile  
405 410 415

Thr Ala Ser Ser Ala Gly Ser Gly Gly Ser Ser Gly Gly Gly Gly Asn  
 420 425 430  
 Ser Phe Ser Phe Ser Ser Ala Ser Ser Leu Ser Ser Ser Ser Thr Ser  
 435 440 445  
 Ala Gly Cys Ala Ser Ser Leu Gly Gly Gly Gly Ala Ser Glu Leu Leu  
 450 455 460  
 Pro Ala Thr Gln Pro Thr Ala Ser Ser Ala Pro Lys Ser Pro Glu Pro  
 465 470 475 480  
 Ala Gln Gly Ala Leu Gly Cys Leu  
 485

<210> 3171

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3171

Met Lys Leu Asn Glu Glu Val Lys Gln Leu Val Gln Asp Gly Lys Val  
 1 5 10 15  
 Thr Arg Phe His Thr Ser Gln Pro Arg Cys Val Val Trp Leu Arg Ala  
 20 25 30  
 Trp Gly Trp Gly Arg Ala Arg Gly Leu Thr Pro Val Ile Pro Ala Leu  
 35 40 45  
 Trp Glu Ala Lys Ala Gly Gly Ser Pro Glu Val Arg Ser Ser Arg Pro  
 50 55 60  
 Ala Trp Pro Thr Arg Arg Asn Leu Val Ser Thr Lys Asn Thr Lys Ile  
 65 70 75 80  
 Ser Pro Val Trp Trp His Arg Pro Val Ile Pro Ala Thr Trp Glu Pro

	85	90	95
Glu Ala Gly Glu Ser Leu Glu Pro Gly Arg Gln Arg Leu Gln			
100	105	110	

&lt;210&gt; 3172

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3172

Met Lys Arg Leu Cys Leu Gln Val Gly Ser Trp Leu Arg Glu His Pro			
1	5	10	15
Gly His Pro Arg Gln Asn Thr Ser Glu Asn Gly Gln Pro Gly Val Thr			
20	25	30	
Val Gly Gly Thr Asp Glu Gly Val Ser His Trp Arg Asp Leu Gln Pro			
35	40	45	
Arg Glu Gln Ala Leu Gly Phe Ser Ala Ile His Val His Ser Arg Thr			
50	55	60	
Trp Ser Leu Pro Arg Thr Gly Arg His Ser His Thr Ser Cys Phe Gln			
65	70	75	80
Cys Cys Pro Gly Arg Trp Ser Lys Leu Pro Gln Ala Pro Val Ala Leu			
85	90	95	
Gly Pro Val Pro Ser Gly Phe Gly Phe Phe Thr Ser Asp Phe Phe Leu			
100	105	110	
Ser Ser Pro Ser Ala Ser Pro Ser Gly Cys Gly Pro Ser Ala Pro Arg			
115	120	125	
Pro Ile Thr Ser Leu Pro Pro Ala Gln Ala Pro Lys His His Pro Glu			
130	135	140	

Leu Ser Pro Ile Leu Pro Thr Thr Thr Val Pro His Phe Pro Pro Gln  
 145                      150                      155                      160  
 His Ser Arg Ile Ala Gly Arg Ala Leu Arg His Ala Trp Leu Ile Leu  
                          165                      170                      175  
 Leu Cys Ala Gln Leu Trp Leu Phe Ser Met Leu Leu Ser Met Leu Leu  
                          180                      185                      190  
 Leu His

<210> 3173

<211> 468

<212> PRT

<213> Homo sapiens

<400> 3173

Met Pro Ala Gly Met Phe Val Gly Val Ala Ser Ala Gln Gly Ala Asn  
   1                      5                      10                      15  
 Pro Cys Arg Thr Pro Glu Glu Thr Phe Glu Ser Gly Gly Leu Asp Val  
                          20                      25                      30  
 Gln Gly Thr Ala Gly Ser Leu Asp Glu Glu Glu Glu Glu Glu Arg  
                          35                      40                      45  
 Phe His Thr Val Leu Glu Gln Leu Gly Val Ala Pro Val Leu Gly Glu  
                          50                      55                      60  
 Gln Arg Ala Val Arg Thr Leu Trp Ala Arg Leu Gln Arg Glu Arg Pro  
   65                      70                      75                      80  
 Glu Leu Leu Gly Ser Phe Glu Asp Val Leu Ile Arg Ala Ser Ala Cys  
                          85                      90                      95  
 Leu Glu Glu Ala Ala Arg Glu Arg Asp Gly Leu Glu Arg Ala Leu Arg

100 105 110  
Arg Arg Glu Ser Glu His Glu Arg Glu Val Arg Ala Leu Tyr Glu Glu  
115 120 125  
Thr Glu Gln Leu Arg Glu Gln Ser Arg Arg Pro Pro Ser Gln Val Gly  
130 135 140  
Phe Gly Pro Arg Pro Ser Arg Gln Ala Gln Ser His Leu Ala Gly Leu  
145 150 155 160  
Pro Gly Ser Ala Phe Ser Glu Leu Ile Pro Pro Arg Arg Pro His Leu  
165 170 175  
Arg Gly Ser Arg Leu Pro Ser Ala Arg Gly Asp Pro Thr Gly Pro His  
180 185 190  
Val Ser Pro Pro Ser Gly Leu Leu His Pro Thr Pro Leu Arg Pro Gly  
195 200 205  
Pro Leu Pro Ala Pro Gly Pro Pro Cys Thr Ser Phe Ala Trp Pro Ser  
210 215 220  
Gly Arg Arg Arg Leu Ser Gly Pro Pro Cys Val Pro Glu Leu Arg Pro  
225 230 235 240  
Arg Gly Ala Glu Lys Pro Ser Gly Ala Gly Ala Ala Asp Pro Arg Ala  
245 250 255  
Gly Pro Gly Thr Arg Gly Pro Ala Ala Ala Gly Val Arg Ala Ala Ala  
260 265 270  
Ala Arg Pro Gly Cys Gly Ala Pro Gly Gly Thr Gly Pro Glu Leu Pro  
275 280 285  
Ala Val Ala Gly Ala Arg Gly Ala Ala Asn Ala Ala Gly Gly Gly Ala  
290 295 300  
Gly Ala Asp Pro Gln Ala Gly Glu Arg Ser Thr Arg Pro Pro Gly Ala  
305 310 315 320  
Asn Pro Thr Val Pro Trp Asp Gly Ala Gly Arg Ala Pro Val Arg Val  
325 330 335

Pro Gly Ala Gly Pro Thr Gly Ala Gln Val Trp Ala Thr Phe Ile Pro

340

345

350

Ile Ser Ser Pro Arg Pro Ala Pro Trp Glu Gly Gly Ser Ser Arg Gly

355

360

365

Ser Gly Gly Ser Pro Arg Ser Leu Pro Ala Ala Gly Ser Pro Pro Pro

370

375

380

Ile His Arg Asp Val Val Ala Val Ser Arg Asn Met Gln Lys Glu Lys

385

390

395

400

Val Ser Leu Leu Arg Gln Leu Glu Leu Leu Arg Glu Leu Asn Thr Arg

405

410

415

Leu Arg Asp Asp Arg Asp Ala Cys Glu Ala Arg Arg Ala Gly Ser Ser

420

425

430

Cys Arg Lys Ala Leu Thr Thr Ala Arg Leu Pro Gly Pro Thr Cys Cys

435

440

445

Cys Cys Cys Cys Trp Ala Arg Pro Pro Arg Arg Gly Ser Gly His Leu

450

455

460

Pro Ser Ala Arg

465

<210> 3174

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3174

Met Ala Pro Gln Arg Pro Leu Val Gln Ala Gly Arg Ala Ala Gln Gly

1

5

10

15

Gly Tyr His Ala Cys Cys Pro Leu Thr Gly Leu Pro Ser Gly His Pro

20	25	30
Glu Leu Pro Glu Asp Thr Pro Ala Gly Arg Leu Gln Pro Asp Gln His		
35	40	45
Arg Pro Gly Pro His Gly Thr Leu Ser Pro Pro Ser Leu Pro Leu Pro		
50	55	60
Thr Ser Cys Pro Ser Ala Cys Pro Ala Pro Asp Ser Asp Gly Arg Val		
65	70	75
80		
Thr Arg Asp Arg Ile Ser Gly Leu Glu Pro His Trp Leu Pro Thr Ser		
85	90	95
Gly Ser Cys Ser Gly Val Thr Gly Pro Ala Ser Tyr Ser Trp Ala Ala		
100	105	110
Pro Leu His Cys Arg Val Leu Met Leu Pro Gly Glu Gly Arg Pro His		
115	120	125
Pro Gly Ala Val Gly Gln Pro Arg Val Ser Pro Ser Gln Val Ser Ala		
130	135	140
Leu Leu Phe Ser Ser Phe Leu Trp Phe Ala Ile Arg Cys Gly Cys Ser		
145	150	155
160		
Leu Asp Arg Lys Gly Lys Tyr Thr Leu Thr Pro Arg Ala Cys Gly Arg		
165	170	175
Gln Pro Gln Glu Pro Ser Leu Leu Arg Cys Ser Gln Gly Gly Pro Thr		
180	185	190
His Cys Leu His Ser Glu Ala Val Ala Ile Gly Pro Arg Gly Cys Ser		
195	200	205
Gly Ser Leu Arg Trp Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu		
210	215	220
Ser Cys His Leu Ala Ala His Arg Ala Leu Gln Gly Arg Ser Arg Gly		
225	230	235
240		
Gly Leu Ser Gly Cys Pro Glu Arg Gly Leu Ser Asp		
245	250	

&lt;210&gt; 3175

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3175

Met Met Ser Pro Ile Leu Gln Val Lys Ser Pro Cys Pro Arg Arg Leu  
 1 5 10 15  
 Arg Asp Leu Thr His Ser Val Ala Ser Arg Lys Phe Gly Ala Gly Thr  
 20 25 30  
 Cys Ala Gln Val Cys Leu Thr Leu Arg Thr Ser Trp Ile Arg Gly Ala  
 35 40 45  
 Gly Gly Met Leu Arg Phe Val Leu Leu Asp Asn Ser Ala Phe Leu Phe  
 50 55 60  
 Ala Ser Ala Thr Ile Met Ser Leu Glu Asp Phe Glu Gln Arg Leu Asn  
 65 70 75 80  
 Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys  
 85 90 95  
 Glu Asn Leu Leu Glu Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp  
 100 105 110  
 Leu Arg Gln Glu Leu Ala Val Gln Gln Lys Gln Glu Lys Pro Arg Thr  
 115 120 125  
 Pro Met Pro Ser Ser Val Glu Ala Glu Arg Thr Asp Thr Ala Val Gln  
 130 135 140  
 Ala Thr Gly Ser Val Pro Ser Thr Pro Ile Ala His Arg Gly Pro Ser  
 145 150 155 160  
 Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg Arg Gly Leu Asp Asp Ser



165	170	175
Thr Gly Gly Thr Pro Leu Thr Pro Ala Ala Arg Ile Ser Ala Leu Asn		
180	185	190
Ile Val Gly Asp Leu Leu Arg Lys Val Gly Val Arg Pro His Phe Pro		
195	200	205
Gly Val Trp Cys Leu Pro Ala Cys Leu Ser Gly Cys Val Lys Gly Val		
210	215	220
Asp Leu Val Pro Ser Leu Ser Ser Phe Phe Leu Phe Phe Trp Arg Arg		
225	230	235
Gly Leu Ala Leu Leu Leu Arg Leu Glu Cys Ser Gly Met Ile Thr Thr		
245	250	255
His Cys Ser Leu Lys Ile Leu Gly Ser Ser Asp Pro Leu Thr Leu Ala		
260	265	270
Ser Arg Gly Ala Trp Thr Ala Gly Val Arg His Tyr Ala Trp Leu Ile		
275	280	285
Leu Ser Phe Phe Cys Ser Asn Val Gly Ile Ala Val Leu Pro Gly Leu		
290	295	300
Val Leu Asn Ser Trp Pro Gln Val Ile Leu Pro Gly Trp Pro Pro Lys		
305	310	315
Val Leu Gly Leu Gln Ala		
325		

&lt;210&gt; 3176

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3176

Met Leu His Ser Thr Thr Glu Tyr Arg Thr Leu His Leu Thr Thr Glu  
 1 5 10 15  
 Asp Arg Thr Leu His Pro Thr Glu Tyr Thr Thr Ile Pro Pro Ala Thr  
 20 25 30  
 Glu Tyr Arg Thr Arg His Pro Thr Arg Glu Tyr Arg Thr Arg His Pro  
 35 40 45  
 Thr Arg Glu Tyr Arg Thr His Tyr Pro Thr Thr Glu Tyr Arg Thr Leu  
 50 55 60  
 His Gln Gln Gln Asn Ile Gln His Ala Thr Gln Arg Gln Asn Ile Gln  
 65 70 75 80  
 His Ala Thr Gln Gln Gln Asn Ile Gln His Ala Thr Gln Gln Gln Gln  
 85 90 95  
 Asn Thr Pro Pro Asn Arg Arg  
 100

&lt;210&gt; 3177

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3177

Met Ala Phe Tyr Ser Thr Pro Glu Tyr Asp Ile Gln Leu Ala Arg Gly  
 1 5 10 15  
 Leu Leu Ser Gly Met Phe Leu Phe Ala Thr Arg Arg Ser Glu Pro Ala  
 20 25 30  
 Gly Arg Pro His Ser Trp His Thr Thr Lys Ser Gly Glu Lys Gln Pro  
 35 40 45  
 Asp Ala Ser Met Met Gln Ile Ser Gln Gly Met Ile Gly Pro Pro Trp

50                                      55                                      60  
 His Gln Ser Tyr His Ser Ser Ser Ser Thr Ser Asp Leu Ser Asn Tyr  
 65                                      70                                      75                                      80  
 Asp His Ala Tyr Leu Arg Arg Ser Pro Asp Gln Cys Ser Ser Gln Gly  
                                     85                                      90                                      95  
 Ser Met Glu Ser Leu Glu Pro Ser Gly Ala Tyr Pro Pro Cys His Leu  
                                     100                                      105                                      110  
 Ser Pro Ala Lys Ser Thr Gly Ser Ile Asp Gln Leu Ser His Phe His  
                                     115                                      120                                      125  
 Asn Lys Arg Asp Ser Ala Tyr Ser Ser Phe Ser Thr Ser Ser Ser Ile  
                                     130                                      135                                      140  
 Leu Glu Tyr Pro His Pro Gly Lys Arg Val Lys Thr Arg Asp Leu Pro  
 145                                      150                                      155                                      160  
 Gly Ser Gln Ser Pro Gly Arg Ala Ile Ser Arg Lys Thr Thr Met Pro  
                                     165                                      170                                      175  
 Thr Ser Gly Gly Gly Trp Arg Glu Lys Ala  
                                     180                                      185

<210> 3178

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3178

Met Pro Gly Leu Cys His Ile Phe Phe Phe Phe Phe Phe Phe Leu Phe  
 1                                      5                                      10                                      15  
 Leu Val Glu Thr Gly Phe Cys Arg Val Gly Gln Ala Gly Leu Glu Val  
                                     20                                      25                                      30

Pro Thr Ser Ser Asp Pro Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile  
                   35                  40                  45  
 Thr Gly Met Ser His Cys Ala Gln Pro Pro Cys His Ile Ser Asn Asp  
                   50                  55                  60  
 Gln Lys Phe Leu Leu Pro Val Leu Gly Asn Trp Arg Gly Ile Ser Tyr  
                   65                  70                  75                  80  
 Arg Val His Cys Thr Val Pro Cys Leu Cys Ser Val Ile Ser Asn Leu  
                                   85                  90                  95  
 Leu Leu Gln Ile Lys  
                                   100

<210> 3179

<211> 321

<212> PRT

<213> Homo sapiens

<400> 3179

Met Glu His Pro Ser Lys Met Glu Phe Phe Gln Lys Leu Gly Tyr Asp  
           1                  5                  10                  15  
 Arg Glu Asp Val Leu Arg Val Leu Gly Lys Leu Gly Glu Gly Ala Leu  
                   20                  25                  30  
 Val Asn Asp Val Leu Gln Glu Leu Ile Arg Thr Gly Ser Arg Pro Gly  
                   35                  40                  45  
 Ala Leu Glu His Leu Ala Ala Pro Arg Leu Val Pro Arg Gly Ser Cys  
                   50                  55                  60  
 Gly Val Pro Asp Ser Ala Gln Arg Gly Pro Gly Thr Ala Leu Glu Glu  
                   65                  70                  75                  80  
 Asp Phe Arg Thr Leu Ala Ser Ser Leu Arg Pro Ile Val Ile Asp Gly

	85		90		95
Ser Asn Val Ala Met Ser His Gly Asn Lys Glu Thr Phe Ser Cys Arg					
	100		105		110
Gly Ile Lys Leu Ala Val Asp Trp Phe Arg Asp Arg Gly His Thr Tyr					
	115		120		125
Ile Lys Val Phe Val Pro Ser Trp Arg Lys Asp Ser Pro Arg Ala Asp					
	130		135		140
Thr Pro Ile Arg Glu Gln His Val Leu Ala Glu Leu Glu Arg Gln Ala					
145		150		155	160
Val Leu Val Tyr Thr Pro Ser Arg Lys Val His Gly Lys Arg Leu Val					
	165		170		175
Cys Tyr Asp Asp Arg Tyr Ile Val Lys Val Ala Tyr Glu Gln Asp Gly					
	180		185		190
Val Ile Val Ser Asn Asp Asn Tyr Arg Asp Leu Gln Ser Glu Asn Pro					
	195		200		205
Glu Trp Lys Trp Phe Ile Glu Gln Arg Leu Leu Met Phe Ser Phe Val					
	210		215		220
Asn Asp Arg Phe Met Pro Pro Asp Asp Pro Leu Gly Arg His Gly Pro					
225		230		235	240
Ser Leu Ser Asn Phe Leu Ser Arg Lys Pro Lys Pro Pro Glu Pro Ser					
	245		250		255
Trp Gln His Cys Pro Tyr Gly Lys Lys Cys Thr Tyr Gly Ile Lys Cys					
	260		265		270
Lys Phe Tyr His Pro Glu Arg Pro His His Ala Gln Leu Ala Val Ala					
	275		280		285
Asp Glu Leu Arg Ala Lys Thr Gly Ala Arg Leu Gly Val Arg Gly Arg					
	290		295		300
Pro Pro Ala Ser Ala Arg Pro Ala Ala Pro Ala Ala Gly Arg Thr Pro					
305		310		315	320

Pro

<210> 3180

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3180

Met Asp Val Ser Gly Arg Thr Ala Ala Thr Leu Arg Glu Arg Gly His

1 5 10 15

Pro Gly Gly Gly Ala Gln Gly Arg Ala Gly His Val Trp Ser Ala His

20 25 30

Ser Val Pro Gly His Arg Ile Ala Pro Met Val Trp Arg Ser Leu Ser

35 40 45

Val Ala Ser Leu Pro Leu Val Thr Trp Leu Asp Pro Ser Asn Pro Glu

50 55 60

Asn Leu Glu Lys Pro Val Gly Arg Ser Gly Cys Cys Val Ser Leu Ser

65 70 75 80

Thr Glu Pro Ser Cys Ser Thr Glu Glu Leu Cys Ala Lys Gly Ala Phe

85 90 95

Ala Gly Ala Gly

100

<210> 3181

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3181

Met Thr Phe Ile Cys Thr Gly Lys Pro Lys Lys Phe Val Ser Cys Phe  
1 5 10 15  
Ile Thr Met Leu Ala Leu Leu Trp Trp Ser Gly Thr Lys Pro Ala Ile  
20 25 30  
Ser Pro Arg Tyr Ile Ile Leu Phe Arg Gly Ile Leu Tyr Ser Phe Ser  
35 40 45  
Gln Phe Cys Leu Gln Phe Gln Arg Ser Thr Asp Pro Ser Lys Pro Ala  
50 55 60  
Leu Asp Thr Arg Leu Gly Gly Ile Ala Cys Gln Glu Val Leu Arg Leu  
65 70 75 80  
Phe Thr Pro Arg Cys Phe Thr Ile Gly Leu Arg Ser Arg Pro Cys Cys  
85 90 95  
Pro His Cys Thr Val Glu His Glu Gly Gly Glu Trp Gly Gly Arg Glu  
100 105 110  
Gly Trp Gly Arg Pro Gly Ala Thr Arg Leu Trp Cys Leu Glu Lys Ala  
115 120 125  
Phe Ser Val Ala Val Gly Lys Leu Gln Asp Arg Lys Ala Arg Leu Gln  
130 135 140  
Gly Pro His Gly Ala Lys Gly Leu Gln Pro  
145 150

<210> 3182

<211> 183

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3182

Met Gly Arg Ala Asp Ile Thr Arg Asp Phe Gly Ala Leu Thr Gly Ala  
 1 5 10 15  
 Ser Asn Leu Gly Cys Met Asp Thr Ser Cys Trp Leu Glu Ser Pro Arg  
 20 25 30  
 Tyr Glu Cys Val Trp Val Cys Ala Pro Phe Met Cys Cys His Arg Ala  
 35 40 45  
 His Glu Cys Ala Glu Arg Glu Gly His Gly Gln Gly Ala Met Val Asp  
 50 55 60  
 Arg Arg Pro Ser Trp Gly Phe Gly Gly Val Leu Asp Pro Thr Leu Thr  
 65 70 75 80  
 Glu His Cys Pro Lys Ala Leu Pro Phe Gln Ala Pro Phe Pro Glu Pro  
 85 90 95  
 Pro Thr Pro Gly Pro Pro Thr Cys Trp Val Leu Pro Pro Ala Gly Pro  
 100 105 110  
 Ala Met Arg Gly His His Ala Ser Leu Thr Met Gln Gly His His Thr  
 115 120 125  
 Ser Leu Thr Met Gln Gly His His Ala Ser Leu Thr Met Gln Gly His  
 130 135 140  
 His Ala Gly Ser Pro Cys Arg Val Thr Met Trp Gly His His Ala Gly  
 145 150 155 160  
 Leu Thr Met Trp Gly Phe Arg Ser Leu Leu Ser Thr Leu Pro Thr His  
 165 170 175  
 Gly His Ser Pro Trp Gly Leu  
 180

&lt;210&gt; 3183



&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3183

Met Leu Ser Ala Ser Cys Ser Gly Leu Val Ile Leu Leu Ile Phe Arg

1 5 10 15

Arg Thr Ser Gly Asp Ser Val Thr Gln Thr Glu Gly Pro Val Thr Leu

20 25 30

Pro Glu Arg Ala Ala Leu Thr Leu Asn Cys Thr Tyr Gln Ser Ser Tyr

35 40 45

Ser Thr Phe Leu Phe Trp Tyr Val Gln Tyr Leu Asn Lys Glu Pro Glu

50 55 60

Leu Leu Leu Lys Ser Ser Glu Asn Gln Glu Thr Asp Ser Arg Gly Phe

65 70 75 80

Gln Ala Ser Pro Ile Lys Ser Asp Ser Ser Phe His Leu Glu Lys Pro

85 90 95

Ser Val Gln Leu Ser Asp Ser Ala Val Tyr Tyr Cys Ala Leu Arg Asp

100 105 110

Arg Val Gly Gly Thr Ala Ala Arg Ala Gln His Lys Pro Trp Gly Thr

115 120 125

Gln Tyr Pro Ala Trp Leu Arg Arg

130 135

&lt;210&gt; 3184

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3184

Met Asn Thr Glu Met Tyr Gln Thr Pro Met Glu Val Ala Val Tyr Gln  
 1 5 10 15  
 Leu His Asn Phe Ser Ile Ser Phe Phe Ser Ser Leu Leu Gly Gly Asp  
 20 25 30  
 Val Val Ser Val Lys Leu Asp Asn Ser Ala Ser Gly Ala Ser Val Val  
 35 40 45  
 Ala Ile Asp Asn Lys Ile Glu Gln Ala Met Asp Leu Val Lys Asn His  
 50 55 60  
 Leu Met Tyr Ala Val Arg Glu Glu Val Glu Ile Leu Lys Glu Gln Ile  
 65 70 75 80  
 Arg Glu Leu Val Glu Lys Asn Ser Gln Leu Glu Arg Glu Asn Thr Leu  
 85 90 95  
 Leu Lys Ala Leu Ala Ser Pro Glu Gln Leu Glu Lys Phe Gln Ser Cys  
 100 105 110  
 Leu Ser Pro Glu Glu Pro Ala Pro Glu Ser Pro Gln Val Pro Glu Ala  
 115 120 125  
 Pro Gly Gly Ser Ala Val  
 130

&lt;210&gt; 3185

&lt;211&gt; 515

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3185

Met Ala Lys Ser Asn Gly Glu Asn Gly Pro Arg Ala Pro Ala Ala Gly

1                      5                      10                      15  
Glu Ser Leu Ser Gly Thr Arg Glu Ser Leu Ala Gln Gly Pro Asp Ala  
20                      25                      30  
Ala Thr Thr Asp Glu Leu Ser Ser Leu Gly Ser Asp Ser Glu Ala Asn  
35                      40                      45  
Gly Phe Ala Glu Arg Arg Ile Asp Lys Phe Gly Phe Ile Val Gly Ser  
50                      55                      60  
Gln Gly Ala Glu Gly Ala Pro Cys Pro Leu Leu His Arg Leu Glu Glu  
65                      70                      75                      80  
Val Pro Leu Glu Val Leu Arg Gln Arg Glu Ser Lys Trp Leu Asp Met  
85                      90                      95  
Leu Asn Asn Trp Asp Lys Trp Met Ala Lys Lys His Lys Lys Ile Arg  
100                      105                      110  
Leu Arg Cys Gln Lys Gly Ile Pro Pro Ser Leu Arg Gly Arg Ala Trp  
115                      120                      125  
Gln Tyr Leu Ser Gly Gly Lys Val Lys Leu Gln Gln Asn Pro Gly Lys  
130                      135                      140  
Phe Asp Glu Leu Asp Met Ser Pro Gly Asp Pro Lys Trp Leu Asp Val  
145                      150                      155                      160  
Ile Glu Arg Asp Leu His Arg Gln Phe Pro Phe His Glu Met Phe Val  
165                      170                      175  
Ser Arg Gly Gly His Gly Gln Gln Asp Leu Phe Arg Val Leu Lys Ala  
180                      185                      190  
Tyr Thr Leu Tyr Arg Pro Glu Glu Gly Tyr Cys Gln Ala Gln Ala Pro  
195                      200                      205  
Ile Ala Ala Val Leu Leu Met His Met Pro Ala Glu Gln Ala Phe Trp  
210                      215                      220  
Cys Leu Val Gln Ile Cys Glu Lys Tyr Leu Pro Gly Tyr Tyr Ser Glu  
225                      230                      235                      240

Lys Leu Glu Ala Ile Gln Leu Asp Gly Glu Ile Leu Phe Ser Leu Leu  
245 250 255  
Gln Lys Val Ser Pro Val Ala His Lys His Leu Ser Arg Gln Lys Ile  
260 265 270  
Asp Pro Leu Leu Tyr Met Thr Glu Trp Phe Met Cys Ala Phe Ser Arg  
275 280 285  
Thr Leu Pro Trp Ser Ser Val Leu Arg Val Trp Asp Met Phe Phe Cys  
290 295 300  
Glu Gly Val Lys Ile Ile Phe Arg Val Gly Leu Val Leu Leu Lys His  
305 310 315 320  
Ala Leu Gly Ser Pro Glu Lys Val Lys Ala Cys Gln Gly Gln Tyr Glu  
325 330 335  
Thr Ile Glu Arg Leu Arg Ser Leu Ser Pro Lys Ile Met Gln Glu Ala  
340 345 350  
Phe Leu Val Gln Glu Val Val Glu Leu Pro Val Thr Glu Arg Gln Ile  
355 360 365  
Glu Arg Glu His Leu Ile Gln Leu Arg Arg Trp Gln Glu Thr Arg Gly  
370 375 380  
Glu Leu Gln Cys Arg Ser Pro Pro Arg Leu His Gly Ala Lys Ala Ile  
385 390 395 400  
Leu Asp Ala Glu Pro Gly Pro Arg Pro Ala Leu Gln Pro Ser Pro Ser  
405 410 415  
Ile Arg Leu Pro Leu Asp Ala Pro Leu Pro Gly Ser Lys Ala Lys Pro  
420 425 430  
Lys Pro Pro Lys Gln Ala Gln Lys Glu Gln Arg Lys Gln Met Lys Gly  
435 440 445  
Arg Gly Gln Leu Glu Lys Pro Pro Ala Pro Asn Gln Ala Met Val Val  
450 455 460  
Ala Ala Ala Gly Asp Ala Cys Pro Pro Gln His Val Pro Pro Lys Asp

465                      470                      475                      480  
 Ser Ala Pro Lys Asp Ser Ala Pro Gln Asp Leu Ala Pro Gln Val Ser  
                          485                      490                      495  
 Ala His His Arg Ser Gln Glu Ser Leu Thr Ser Gln Glu Ser Glu Asp  
                          500                      505                      510  
 Thr Tyr Leu  
                          515

<210> 3186

<211> 402

<212> PRT

<213> Homo sapiens

<400> 3186

Met Arg Ser Gly Gly Val Arg Ser Phe Ala Leu Glu Leu Ala Arg Gly  
   1                      5                      10                      15  
 Pro Gly Gly Ala Tyr Arg Gly Gly Glu Arg Leu Cys Gly Arg Val Leu  
                          20                      25                      30  
 Leu Glu Ala Ala Ala Pro Leu Arg Val Arg Ala Leu Glu Val Lys Ala  
                          35                      40                      45  
 Arg Gly Gly Ala Ala Thr His Trp Leu Glu Gly Arg Ser Val Gly Val  
                          50                      55                      60  
 Asn Ala Val Ser Ser Asp Tyr Ala Ala Ala Glu Thr Tyr Leu Arg Arg  
   65                      70                      75                      80  
 Arg Gln Leu Leu Leu Arg Asp Thr Gly Glu Thr Thr Thr Leu Pro Pro  
                          85                      90                      95  
 Gly Arg His Glu Phe Leu Phe Ser Phe Gln Leu Pro Pro Thr Leu Val  
                          100                      105                      110

Thr Ser Phe Glu Gly Lys His Gly Ser Val Arg Tyr Cys Ile Lys Ala  
 115 120 125  
 Thr Leu His Arg Pro Trp Val Pro Ala Arg Arg Ala Arg Lys Val Phe  
 130 135 140  
 Thr Val Ile Glu Pro Val Asp Ile Asn Thr Pro Ala Leu Leu Ala Pro  
 145 150 155 160  
 Gln Ala Gly Ala Arg Glu Lys Val Ala Arg Ser Trp Tyr Cys Asn Arg  
 165 170 175  
 Gly Leu Val Ser Leu Ser Ala Lys Ile Asp Arg Lys Gly Tyr Thr Pro  
 180 185 190  
 Gly Glu Val Ile Pro Val Phe Ala Glu Ile Asp Asn Gly Ser Thr Arg  
 195 200 205  
 Pro Val Leu Pro Arg Ala Ala Val Val Gln Thr Gln Thr Phe Met Ala  
 210 215 220  
 Arg Gly Ala Arg Lys Gln Lys Arg Ala Val Val Ala Ser Leu Ala Gly  
 225 230 235 240  
 Glu Pro Val Gly Pro Gly Gln Arg Ala Leu Trp Gln Gly Arg Ala Leu  
 245 250 255  
 Arg Ile Pro Pro Val Gly Pro Ser Ile Leu His Cys Arg Val Leu His  
 260 265 270  
 Val Asp Tyr Ala Leu Lys Val Cys Val Asp Ile Pro Gly Thr Ser Lys  
 275 280 285  
 Leu Leu Leu Glu Leu Pro Leu Val Ile Gly Thr Ile Pro Leu His Pro  
 290 295 300  
 Phe Gly Ser Arg Ser Ser Ser Val Gly Ser His Ala Ser Phe Leu Leu  
 305 310 315 320  
 Asp Trp Arg Leu Gly Ala Leu Pro Glu Arg Pro Glu Ala Pro Pro Glu  
 325 330 335  
 Tyr Ser Glu Val Val Ala Asp Thr Glu Glu Ala Ala Leu Gly Gln Ser

340	345	350
Pro Phe Pro Leu Pro Gln Asp Pro Asp Met Ser Leu Glu Gly Pro Phe		
355	360	365
Phe Ala Tyr Ile Gln Glu Phe Arg Tyr Arg Pro Pro Pro Leu Tyr Ser		
370	375	380
Glu Glu Asp Pro Asn Pro Leu Leu Gly Asp Met Arg Pro Arg Cys Met		
385	390	395
Thr Cys		400

&lt;210&gt; 3187

&lt;211&gt; 517

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3187

Met Gly Asp Ile Gln Val Leu Thr Leu Leu Pro Leu Pro Pro Ala Arg		
1	5	10
Pro Glu Ser Thr Met Pro Asp Pro Phe Pro Leu Leu Arg Ser Met Gly		
20	25	30
Ser Ala Phe Glu Arg Val Val Arg Arg Val Val Gln Glu Leu Asp His		
35	40	45
Gly Gly Glu Phe Ile Pro Val Thr Ser Leu Gln Ser Ser Thr Gly Phe		
50	55	60
Gln Pro Tyr Cys Leu Val Val Arg Lys Pro Ser Ser Ser Trp Phe Trp		
65	70	75
Lys Pro Arg Tyr Lys Cys Val Asn Leu Ser Ile Lys Asp Ile Leu Glu		
85	90	95

Pro Asp Ala Ala Glu Pro Asp Val Gln Arg Gly Arg Ser Phe His Phe  
100 105 110  
Tyr Asp Ala Met Asp Gly Gln Ile Gln Gly Ser Val Glu Leu Ala Ala  
115 120 125  
Pro Gly Gln Ala Lys Ile Ala Gly Gly Ala Ala Val Ser Asp Ser Ser  
130 135 140  
Ser Thr Ser Met Asn Val Tyr Ser Leu Ser Val Asp Pro Asn Thr Trp  
145 150 155 160  
Gln Thr Leu Leu His Glu Arg Trp Ala Arg Arg Gly Gln Gly Arg Ala  
165 170 175  
Gly Pro His Pro Pro Gln Ala Thr Leu Leu Leu Phe Ile Tyr Leu Phe  
180 185 190  
Lys Leu Phe Phe Glu Val Arg Phe Cys Tyr Leu Gly Gln Gly Gly Leu  
195 200 205  
Glu Leu Leu Ala Ser Ser Ser Pro Pro Ala Ser Ala Ser Gln Ser Ala  
210 215 220  
Gly Ile Thr Gly Val Ser His Cys Ala Arg Ser Gln Pro Cys Ser Trp  
225 230 235 240  
Glu Gly His Asn Leu Gly Ala Ser Gly Lys Ser Gln Arg Gln Lys Ser  
245 250 255  
Ala Val Ala Gly Thr Ser Leu Gln Glu Gly Ser Cys Arg Gly His Leu  
260 265 270  
Gly Pro Pro Leu Pro Gly Leu Asp Pro Lys Asp Arg Thr Glu Pro Gln  
275 280 285  
Ala Ala Val Arg Thr Arg Gly Gly Val Asn Thr Gly Ala Gln Val Arg  
290 295 300  
Gly Pro His Leu Glu Ser Gly Leu Gly Val Pro Glu Ser Thr Phe Pro  
305 310 315 320  
His Gly Val Pro Ser Pro Trp Gly Ala His Gly Glu Ala Ala Gly Ala



325	330	335
Pro Ala Pro Thr Asp Leu Trp Arg Ala Pro Leu His His Leu Pro Arg		
340	345	350
Trp Arg Gly Ala Val Arg Gly Gly Lys Thr Pro Ser Gly Ala Ala Ala		
355	360	365
Gln Arg Ala Leu Leu Leu Leu Gly His Arg His Leu Arg Gln Pro Glu		
370	375	380
His Lys Val Leu Gln Gln Leu Arg Ser Arg Gly Asp Asn Val Tyr Val		
385	390	395
Val Thr Glu Val Leu Gln Thr Gln Lys Glu Val Glu Val Thr Arg Thr		
405	410	415
His Lys Arg Glu Gly Ser Gly Arg Phe Ser Leu Pro Gly Ala Thr Cys		
420	425	430
Leu Gln Val Cys Ser Gln Pro Arg Ala Thr Pro Gly Pro Pro Arg Gly		
435	440	445
His Ala Ala Ala Gly Asp Gly Gly Gly Gly Leu Gly Ser Ala Lys Ala		
450	455	460
Pro Arg Ser Ser Ser Gln Pro Cys Ala Trp Leu Arg Ser Arg Ser His		
465	470	475
Leu Ala Ala Gly Leu Pro Pro Ala Pro Gly Pro His Pro His Pro Thr		
485	490	495
Ala Arg Cys Gln Gly Pro Ala Pro Ser Pro Ser Pro Cys Leu Arg Val		
500	505	510
Arg Ala Arg Ala Ile		
515		

&lt;210&gt; 3188

&lt;211&gt; 669

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3188

Met Ala Glu Gln Glu Ser Leu Glu Phe Gly Lys Ala Gly Phe Val Leu

1 5 10 15

Met Asp Thr Val Ser Met Pro Glu Phe Met Ala Asn Leu Arg Leu Arg

20 25 30

Phe Glu Lys Gly Arg Ile Tyr Thr Phe Ile Gly Glu Val Val Val Ser

35 40 45

Val Asn Pro Tyr Lys Leu Leu Asn Ile Tyr Gly Arg Asp Thr Ile Glu

50 55 60

Gln Tyr Lys Gly Arg Glu Leu Tyr Glu Arg Pro Pro His Leu Phe Ala

65 70 75 80

Ile Ala Asp Ala Ala Tyr Lys Ala Met Lys Arg Arg Ser Lys Asp Thr

85 90 95

Cys Ile Val Ile Ser Gly Glu Ser Gly Ala Gly Lys Thr Glu Ala Ser

100 105 110

Lys Tyr Ile Met Gln Tyr Ile Ala Ala Ile Thr Asn Pro Ser Gln Arg

115 120 125

Ala Glu Val Glu Arg Val Lys Asn Met Leu Leu Lys Ser Asn Cys Val

130 135 140

Leu Glu Ala Phe Gly Asn Ala Lys Thr Asn Arg Asn Asp Asn Ser Ser

145 150 155 160

Arg Phe Gly Lys Tyr Met Asp Ile Asn Phe Asp Phe Lys Gly Asp Pro

165 170 175

Ile Gly Gly His Ile Asn Asn Tyr Leu Leu Glu Lys Ser Arg Val Ile

180 185 190

Val Gln Gln Pro Gly Glu Arg Ser Phe His Ser Phe Tyr Gln Leu Leu

195	200	205
Gln Gly Gly Ser Glu Gln Met Leu Arg Ser Leu His Leu Gln Lys Ser		
210	215	220
Leu Ser Ser Tyr Asn Tyr Ile His Val Gly Ala Gln Leu Lys Ser Ser		
225	230	235
Ile Asn Asp Ala Ala Glu Phe Arg Val Val Ala Asp Ala Met Lys Val		
245	250	255
Ile Gly Phe Lys Pro Glu Glu Ile Gln Thr Val Tyr Lys Ile Leu Ala		
260	265	270
Ala Ile Leu His Leu Gly Asn Leu Lys Phe Val Val Asp Gly Asp Thr		
275	280	285
Pro Leu Ile Glu Asn Gly Lys Val Val Ser Ile Ile Ala Glu Leu Leu		
290	295	300
Ser Thr Lys Thr Asp Met Val Glu Lys Ala Leu Leu Tyr Arg Thr Val		
305	310	315
Ala Thr Gly Arg Asp Ile Ile Asp Lys Gln His Thr Glu Gln Glu Ala		
325	330	335
Ser Tyr Gly Arg Asp Ala Phe Ala Lys Ala Ile Tyr Glu Arg Leu Phe		
340	345	350
Cys Trp Ile Val Thr Arg Ile Asn Asp Ile Ile Glu Val Lys Asn Tyr		
355	360	365
Asp Thr Thr Ile His Gly Lys Asn Thr Val Ile Gly Val Leu Asp Ile		
370	375	380
Tyr Gly Phe Glu Ile Phe Asp Asn Asn Ser Phe Glu Gln Phe Cys Ile		
385	390	395
Asn Tyr Cys Asn Glu Lys Leu Gln Gln Leu Phe Ile Gln Leu Val Leu		
405	410	415
Lys Gln Glu Gln Glu Glu Tyr Gln Arg Glu Gly Ile Pro Trp Lys His		
420	425	430

Ile Asp Tyr Phe Asn Asn Gln Ile Ile Val Asp Leu Val Glu Gln Gln  
435 440 445  
His Lys Gly Ile Ile Ala Ile Leu Asp Asp Ala Cys Met Asn Val Gly  
450 455 460  
Lys Val Thr Asp Glu Met Phe Leu Glu Ala Leu Asn Ser Lys Leu Gly  
465 470 475 480  
Lys His Ala His Phe Ser Ser Arg Lys Leu Cys Ala Ser Asp Lys Ile  
485 490 495  
Leu Glu Phe Asp Arg Asp Phe Arg Ile Arg His Tyr Ala Gly Asp Val  
500 505 510  
Val Tyr Ser Val Ile Gly Phe Ile Asp Lys Asn Lys Asp Thr Leu Phe  
515 520 525  
Gln Asp Phe Lys Arg Leu Met Tyr Asn Ser Ser Asn Pro Val Leu Lys  
530 535 540  
Asn Met Trp Pro Glu Gly Lys Leu Ser Ile Thr Glu Val Thr Lys Arg  
545 550 555 560  
Pro Leu Thr Ala Ala Thr Leu Phe Lys Asn Ser Met Ile Ala Leu Val  
565 570 575  
Asp Asn Leu Ala Ser Lys Glu Pro Tyr Tyr Val Arg Cys Ile Lys Pro  
580 585 590  
Asn Asp Lys Lys Ser Pro Gln Ile Phe Asp Asp Glu Arg Cys Arg His  
595 600 605  
Gln Val Glu Tyr Leu Gly Leu Leu Glu Asn Val Arg Val Arg Arg Ala  
610 615 620  
Gly Phe Ala Phe Arg Gln Thr Tyr Glu Lys Phe Leu His Arg Tyr Lys  
625 630 635 640  
Met Ile Ser Glu Phe Thr Trp Pro Asn His Asp Leu Pro Ser Asp Lys  
645 650 655  
Glu Ala Val Lys Lys Leu Ile Glu Arg Trp Phe Ser Gly

660

665

&lt;210&gt; 3189

&lt;211&gt; 703

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3189

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Met Phe Arg Tyr Glu Ser Leu Glu Asp Cys Pro Leu Asp Glu Asp Glu
  1             5             10             15
Asp Ala Phe Gln Gly Leu Gly Glu Glu Asp Glu Glu Ile Asp Gln Phe
      20             25             30
Asn Asp Asp Thr Phe Gly Ser Gly Ala Val Asp Asp Asp Trp Gln Glu
      35             40             45
Ala His Glu Arg Leu Ala Glu Leu Glu Glu Lys Leu Pro Val Ala Val
      50             55             60
Asn Glu Gln Thr Gly Asn Gly Glu Arg Asp Glu Met Asp Leu Leu Gly
      65             70             75             80
Asp His Glu Glu Asn Leu Ala Glu Arg Leu Ser Lys Met Val Ile Glu
      85             90             95
Asn Glu Leu Glu Asp Pro Ala Ile Met Arg Ala Val Gln Thr Arg Pro
      100            105            110
Val Leu Gln Pro Gln Pro Gly Ser Leu Asn Ser Ser Ile Trp Asp Gly
      115            120            125
Ser Glu Val Leu Arg Arg Ile Arg Gly Pro Leu Leu Ala Gln Glu Met
      130            135            140
Pro Thr Val Ser Val Leu Glu Tyr Ala Leu Pro Gln Arg Pro Pro His
      145            150            155            160

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出証特 2 0 0 4 - 3 0 5 9 6 6 1

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Leu Leu Arg Gln Leu Met Asn Leu Gln Ser Ser Asp Pro Ala Thr Glu  
 625                      630                      635                      640  
 Ser Thr Gln Asn Asn Gln Trp Thr Glu Val Met Phe Met Ala Thr Arg  
                          645                      650                      655  
 Glu Leu Leu Arg Ile Pro Gln Ala Ala Leu Ala Lys Pro Ile Ser Ile  
                          660                      665                      670  
 Pro Thr Asn Leu Val Ser Leu Phe Ser Arg Tyr Val Asp Arg Gln Lys  
                          675                      680                      685  
 Leu Asn Leu Leu Glu Thr Lys Leu Gln Leu Val Gln Gly Ile Arg  
                          690                      695                      700

<210> 3190

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3190

Met Arg Ala Gly Pro Gly Pro Thr Val Thr Leu Ala Leu Val Leu Ala  
 1                      5                      10                      15  
 Val Ala Trp Ala Met Glu Leu Lys Pro Thr Ala Pro Pro Ile Phe Thr  
                          20                      25                      30  
 Gly Arg Pro Phe Val Val Ala Trp Asp Val Pro Thr Gln Asp Cys Gly  
                          35                      40                      45  
 Pro Arg Leu Lys Val Pro Leu Asp Leu Asn Ala Phe Asp Val Gln Ala  
                          50                      55                      60  
 Ser Pro Asn Glu Gly Phe Val Asn Gln Asn Ile Thr Ile Phe Tyr Arg  
 65                      70                      75                      80  
 Asp Arg Leu Gly Leu Tyr Pro Arg Phe Asp Ser Ala Gly Arg Ser Val



	85	90	95
His Gly Gly Val Pro Gln Asn Val Ser Leu Trp Ala His Arg Lys Met			
	100	105	110
Leu Gln Lys Arg Val Glu His Tyr Ile Arg Thr Gln Glu Ser Ala Gly			
	115	120	125
Leu Ala Val Ile Asp Trp Glu Asp Trp Arg Pro Val Trp Val Arg Asn			
	130	135	140
Trp Gln Asp Lys Asp Val Tyr Arg Arg Leu Ser Arg Gln Leu Val Ala			
145	150	155	160
Ser Arg His Pro Asp Trp Pro Pro Asp Arg Ile Val Lys Gln Ala Gln			
	165	170	175
Tyr Glu Phe Glu Phe Ala Ala Gln Gln Phe Met Leu Glu Thr Leu Arg			
	180	185	190
Tyr Val Lys Ala Val Arg Pro Arg His Leu Trp Gly Phe Tyr Leu Phe			
	195	200	205
Pro Asp Cys Tyr Asn His Asp Tyr Val Gln Asn Trp Glu Ser Tyr Thr			
	210	215	220
Gly Arg Cys Pro Asp Val Glu Val Ala Arg Asn Asp Gln Leu Ala Trp			
225	230	235	240
Leu Trp Ala Glu Ser Thr Ala Leu Phe Pro Ser Val Tyr Leu Asp Glu			
	245	250	255
Thr Leu Ala Ser Ser Arg His Gly Arg Asn Phe Val Ser Phe Arg Val			
	260	265	270
Gln Glu Ala Leu Arg Val Ala Arg Thr His His Ala Asn His Ala Leu			
	275	280	285
Pro Val Tyr Val Phe Thr Arg Pro Thr Tyr Ser Arg Arg Leu Thr Gly			
	290	295	300
Leu Ser Glu Met Asp Leu Ile Ser Thr Ile Gly Glu Ser Ala Ala Leu			
305	310	315	320

Gly Ala Ala Gly Val Ile Leu Trp Gly Asp Ala Gly Tyr Thr Thr Ser  
325 330 335  
Thr Glu Thr Cys Gln Tyr Leu Lys Asp Tyr Leu Thr Arg Leu Leu Val  
340 345 350  
Pro Tyr Val Val Asn Val Ser Trp Ala Thr Gln Tyr Cys Ser Arg Ala  
355 360 365  
Gln Cys His Gly His Gly Arg Cys Val Arg Arg Asn Pro Ser Ala Ser  
370 375 380  
Thr Phe Leu His Leu Ser Thr Asn Ser Phe Arg Leu Val Pro Gly His  
385 390 395 400  
Ala Pro Gly Glu Pro Gln Leu Arg Pro Val Gly Glu Leu Ser Trp Ala  
405 410 415  
Asp Ile Asp His Leu Gln Thr His Phe Arg Cys Gln Cys Tyr Leu Gly  
420 425 430  
Trp Ser Gly Glu Gln Cys Gln Trp Asp His Arg Gln Ala Ala Gly Gly  
435 440 445  
Ala Ser Glu Ala Trp Ala Gly Ser His Leu Thr Ser Leu Leu Ala Leu  
450 455 460  
Ala Ala Leu Ala Phe Thr Trp Thr Leu  
465 470

&lt;210&gt; 3191

&lt;211&gt; 714

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3191

Met Val Arg Trp Leu Ser Ala Lys Leu Gly Pro Thr Val Ala Ser Arg

1	5	10	15
His Val Ala Arg Asn Leu Leu Arg Leu Leu Thr Ser Cys Tyr Val Gly			
20	25	30	
Pro Thr Arg Gln Gln Phe Thr Val Ser Ser Gly Glu Ser Pro Pro Leu			
35	40	45	
Ser Ala Gly Asn Ile Tyr Gln Lys Arg Pro Val Leu Gly Asp Ile Val			
50	55	60	
Ser Gly Pro Val Leu Ser Cys Leu Leu His Ile Ala Arg Leu Tyr Gly			
65	70	75	80
Glu Pro Val Leu Thr Tyr Gln Tyr Leu Pro Tyr Ile Ser Tyr Leu Val			
85	90	95	
Ala Pro Gly Ser Ala Ser Gly Pro Ser Arg Leu Asn Ser Arg Lys Glu			
100	105	110	
Ala Gly Leu Leu Ala Ala Val Thr Leu Thr Gln Lys Ile Ile Val Tyr			
115	120	125	
Leu Ser Asp Thr Thr Leu Met Asp Ile Leu Pro Arg Ile Ser His Glu			
130	135	140	
Val Leu Leu Pro Val Leu Ser Phe Leu Thr Ser Leu Val Thr Gly Phe			
145	150	155	160
Pro Ser Gly Ala Gln Ala Arg Thr Ile Leu Cys Val Lys Thr Ile Ser			
165	170	175	
Leu Ile Ala Leu Ile Cys Leu Arg Ile Gly Gln Glu Met Val Gln Gln			
180	185	190	
His Leu Ser Glu Pro Val Ala Thr Phe Phe Gln Val Phe Ser Gln Leu			
195	200	205	
His Glu Leu Arg Gln Gln Asp Leu Lys Leu Asp Pro Ala Gly Arg Gly			
210	215	220	
Glu Gly Gln Leu Pro Gln Val Val Phe Ser Asp Gly Gln Gln Arg Pro			
225	230	235	240

Val Asp Pro Ala Leu Leu Asp Glu Leu Gln Lys Val Phe Thr Leu Glu  
245 250 255  
Met Ala Tyr Thr Ile Tyr Val Pro Phe Ser Cys Leu Leu Gly Asp Ile  
260 265 270  
Ile Arg Lys Ile Ile Pro Asn His Glu Leu Val Gly Glu Leu Ala Ala  
275 280 285  
Leu Tyr Leu Glu Ser Ile Ser Pro Ser Ser Arg Asn Pro Ala Ser Val  
290 295 300  
Glu Pro Thr Val Pro Gly Thr Gly Pro Glu Trp Asp Pro His Gly Gly  
305 310 315 320  
Gly Cys Pro Gln Asp Asp Gly His Ser Gly Thr Phe Gly Ser Val Leu  
325 330 335  
Val Gly Asn Arg Ile Gln Ile Pro Asn Asp Ser Arg Pro Glu Asn Pro  
340 345 350  
Gly Pro Leu Gly Pro Ile Ser Gly Val Gly Gly Gly Gly Leu Gly Ser  
355 360 365  
Gly Ser Asp Asp Asn Ala Leu Lys Gln Glu Leu Pro Arg Ser Val His  
370 375 380  
Gly Leu Ser Gly Asn Trp Leu Ala Tyr Trp Gln Tyr Glu Ile Gly Val  
385 390 395 400  
Ser Gln Gln Asp Ala His Phe His Phe His Gln Ile Arg Leu Gln Ser  
405 410 415  
Phe Pro Gly His Ser Gly Ala Val Lys Cys Val Ala Pro Leu Ser Ser  
420 425 430  
Glu Asp Phe Phe Leu Ser Gly Ser Lys Asp Arg Thr Val Arg Leu Trp  
435 440 445  
Pro Leu Tyr Asn Tyr Gly Asp Gly Thr Ser Glu Thr Ala Pro Arg Leu  
450 455 460  
Val Tyr Thr Gln His Arg Lys Ser Val Phe Phe Val Gly Gln Leu Glu

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Ser Asp Asn Gly Val Ile Arg Leu Leu Ala

705

710

<210> 3192

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3192

Met Ala Thr Asn Ile Glu Gln Ile Phe Arg Ser Phe Val Val Ser Lys

1

5

10

15

Phe Arg Glu Ile Gln Gln Glu Leu Ser Ser Gly Arg Asn Glu Gly Gln

20

25

30

Leu Asn Gly Glu Thr Asn Thr Pro Ile Glu Gly Asn Gln Ala Gly Asp

35

40

45

Ala Ala Ala Ser Ala Arg Ser Leu Pro Asn Glu Glu Ile Val Gln Lys

50

55

60

Ile Glu Glu Val Leu Ser Gly Val Leu Asp Thr Glu Leu Arg Tyr Lys

65

70

75

80

Pro Asp Lys Ala Gln Leu Leu Glu Ile Ala Lys Ala Asn Ala Ala Ala

85

90

95

Met Cys Ala Lys Ala Gly Val Pro Leu Pro Pro Asn Leu Lys Pro Ala

100

105

110

Pro Pro Pro Thr Ile Glu Glu Lys Val Ala Lys Lys Ser Gly Gly Ala

115

120

125

Thr Ile Glu Glu Leu Thr Glu Lys Cys Lys Gln Ile Ala Gln Ser Lys

130

135

140

Glu Asp Asp Asp Val Ile Val Asn Lys Pro His Val Ser Asp Glu Glu

145                      150                      155                      160  
Glu Glu Glu Pro Pro Phe Tyr His His Pro Phe Lys Leu Ser Glu Pro  
                                 165                      170                      175  
Lys Pro Ile Phe Phe Asn Leu Asn Ile Ala Ala Ala Lys Pro Thr Pro  
                                 180                      185                      190  
Pro Lys Ser Gln Val Thr Leu Thr Lys Glu Phe Pro Val Ser Ser Gly  
                                 195                      200                      205  
Ser Gln His Arg Lys Lys Glu Ala Asp Ser Val Tyr Gly Glu Trp Val  
                                 210                      215                      220  
Pro Val Glu Lys Asn Gly Glu Glu Asn Lys Asp Asp Asp Asn Val Phe  
225                      230                      235                      240  
Ser Ser Asn Leu Pro Ser Glu Pro Val Asp Ile Ser Thr Ala Met Ser  
                                 245                      250                      255  
Glu Arg Ala Leu Ala Gln Lys Arg Leu Ser Glu Asn Ala Phe Asp Leu  
                                 260                      265                      270  
Glu Ala Met Ser Met Leu Asn Arg Ala Gln Glu Arg Ile Asp Ala Trp  
                                 275                      280                      285  
Ala Gln Leu Asn Ser Ile Pro Gly Gln Phe Thr Gly Ser Thr Gly Val  
                                 290                      295                      300  
Gln Val Leu Thr Gln Glu Gln Leu Ala Asn Thr Gly Ala Gln Ala Trp  
305                      310                      315                      320  
Ile Lys Lys Asp Gln Phe Leu Arg Ala Ala Pro Val Thr Gly Gly Met  
                                 325                      330                      335  
Gly Ala Val Leu Met Arg Lys Met Gly Trp Arg Glu Gly Glu Gly Leu  
                                 340                      345                      350  
Gly Lys Asn Lys Glu Gly Asn Lys Glu Pro Ile Leu Val Asp Phe Lys  
                                 355                      360                      365  
Thr Asp Arg Lys Gly Leu Val Ala Val Gly Glu Arg Ala Gln Lys Arg  
                                 370                      375                      380

Ser Gly Asn Phe Ser Ala Ala Met Lys Asp Leu Ser Gly Lys His Pro  
 385                      390                      395                      400  
 Val Ser Ala Leu Met Glu Ile Cys Asn Lys Arg Arg Trp Gln Pro Pro  
                     405                      410                      415  
 Glu Phe Leu Leu Val His Asp Ser Gly Pro Asp His Arg Lys His Phe  
                     420                      425                      430  
 Leu Phe Arg Val Leu Arg Asn Gly Ser Pro Tyr Gln Pro Asn Cys Met  
                     435                      440                      445  
 Phe Phe Leu Asn Arg Tyr  
                     450

<210> 3193

<211> 664

<212> PRT

<213> Homo sapiens

<400> 3193

Met Leu Met Asp Ala Gly Gln Asp Tyr Met Val Phe Glu Asp Val Ala  
   1                      5                      10                      15  
 Ile His Phe Ser Gln Glu Glu Trp Gly Ile Leu Asn Asp Val Gln Arg  
                     20                      25                      30  
 His Leu His Ser Asp Val Met Leu Glu Asn Phe Ala Leu Leu Ser Ser  
                     35                      40                      45  
 Val Gly Cys Trp His Gly Ala Lys Asp Glu Glu Ala Pro Ser Lys Gln  
                     50                      55                      60  
 Cys Val Ser Val Gly Val Ser Gln Val Thr Thr Leu Lys Pro Ala Leu  
                     65                      70                      75                      80  
 Ser Thr Gln Lys Ala Gln Pro Cys Glu Thr Cys Ser Ser Leu Leu Lys



	85	90	95
Asp Ile Leu His Leu Ala Glu His Asp Gly Thr His Pro Lys Arg Thr			
100	105	110	
Ala Lys Leu Tyr Leu His Gln Lys Glu His Leu Arg Glu Lys Leu Thr			
115	120	125	
Arg Ser Asp Glu Gly Arg Pro Ser Phe Val Asn Asp Ser Val His Leu			
130	135	140	
Ala Lys Arg Asn Leu Thr Cys Met Gln Gly Gly Lys Asp Phe Thr Gly			
145	150	155	160
Asp Ser Asp Leu Gln Gln Gln Ala Leu His Ser Gly Trp Lys Pro His			
165	170	175	
Arg Asp Thr His Gly Val Glu Ala Phe Gln Ser Gly Gln Asn Asn Tyr			
180	185	190	
Ser Cys Thr Gln Cys Gly Lys Asp Phe Cys His Gln His Thr Leu Phe			
195	200	205	
Glu His Gln Lys Ile His Thr Glu Glu Arg Pro Tyr Glu Cys Ser Glu			
210	215	220	
Cys Gly Lys Leu Phe Arg Tyr Asn Ser Asp Leu Ile Lys His Gln Arg			
225	230	235	240
Asn His Thr Gly Glu Arg Pro Tyr Lys Cys Ser Glu Cys Gly Lys Ala			
245	250	255	
Phe Ser Leu Lys Tyr Asn Val Val Gln His Gln Lys Ile His Thr Gly			
260	265	270	
Glu Arg Pro Tyr Glu Cys Ser Glu Cys Gly Lys Ala Phe Leu Arg Lys			
275	280	285	
Ser His Leu Leu Gln His Gln Arg Ile His Thr Arg Pro Arg Pro Tyr			
290	295	300	
Val Cys Ser Glu Cys Gly Lys Ala Phe Leu Thr Gln Ala His Leu Val			
305	310	315	320

Gly His Gln Lys Ile His Thr Gly Glu Arg Pro Tyr Gly Cys Asn Glu  
325 330 335  
Cys Gly Lys Tyr Phe Met Tyr Ser Ser Ala Leu Ile Arg His Gln Lys  
340 345 350  
Val His Thr Gly Glu Arg Pro Phe Tyr Cys Cys Glu Cys Gly Lys Phe  
355 360 365  
Phe Met Asp Ser Cys Thr Leu Ile Ile His Gln Arg Val His Thr Gly  
370 375 380  
Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ser Phe Arg Tyr Arg  
385 390 395 400  
Ser Thr Leu Ile Arg His Gln Lys Val His Thr Gly Glu Lys Pro Tyr  
405 410 415  
Glu Cys Ser Glu Cys Gly Lys Phe Phe Met Asp Thr Ser Thr Leu Ile  
420 425 430  
Ile His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Lys  
435 440 445  
Cys Gly Lys Phe Phe Arg Tyr Cys Phe Thr Leu Asn Arg His Gln Arg  
450 455 460  
Val His Ser Gly Glu Arg Pro Tyr Glu Cys Ser Glu Cys Gly Lys Phe  
465 470 475 480  
Phe Val Asp Ser Cys Thr Leu Lys Ser His Gln Arg Val His Thr Gly  
485 490 495  
Glu Arg Pro Phe Glu Cys Ser Ile Cys Gly Lys Ser Phe Arg Cys Arg  
500 505 510  
Ser Thr Leu Asp Thr His Gln Arg Ile His Thr Gly Glu Arg Pro Tyr  
515 520 525  
Glu Cys Ser Glu Cys Gly Lys Phe Phe Arg His Asn Ser Asn His Ile  
530 535 540  
Arg His Arg Arg Asn His Phe Gly Glu Arg Ser Phe Glu Cys Thr Glu

545                      550                      555                      560  
 Cys Gly Arg Val Phe Ser Gln Asn Ser His Leu Ile Arg His Gln Lys  
                          565                      570                      575  
 Val His Thr Arg Glu Arg Thr Tyr Lys Cys Ser Lys Cys Gly Lys Phe  
                          580                      585                      590  
 Phe Met Asp Ser Ser Thr Leu Ile Ser His Glu Arg Val His Thr Gly  
                          595                      600                      605  
 Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly Lys Val Phe Arg Tyr Asn  
                          610                      615                      620  
 Ser Ser Leu Ile Lys His Arg Arg Ile His Thr Gly Glu Arg Pro Tyr  
 625                      630                      635                      640  
 Gln Cys Ser Glu Cys Gly Arg Val Phe Asn Gln Asn Ser His Leu Ile  
                          645                      650                      655  
 Gln His Gln Lys Val His Thr Arg  
                          660

<210> 3194

<211> 714

<212> PRT

<213> Homo sapiens

<400> 3194

Met Thr Gln Met Ser Gln Val Gln Glu Leu Phe His Glu Ala Ala Gln  
     1                      5                      10                      15  
 Gln Asp Ala Leu Ala Gln Pro Gln Pro Trp Trp Lys Thr Gln Leu Phe  
                          20                      25                      30  
 Met Trp Glu Pro Val Leu Phe Gly Thr Trp Asp Gly Val Phe Thr Ser  
                          35                      40                      45

Cys Met Ile Asn Ile Phe Gly Val Val Leu Phe Leu Arg Thr Gly Trp  
50 55 60  
Leu Val Gly Asn Thr Gly Val Leu Leu Gly Met Phe Leu Val Ser Phe  
65 70 75 80  
Val Ile Leu Val Ala Leu Val Thr Val Leu Ser Gly Ile Gly Val Gly  
85 90 95  
Glu Arg Ser Ser Ile Gly Ser Gly Gly Val Tyr Ser Met Ile Ser Ser  
100 105 110  
Val Leu Gly Gly Gln Thr Gly Gly Thr Ile Gly Leu Leu Tyr Val Phe  
115 120 125  
Gly Gln Cys Val Ala Gly Ala Met Tyr Ile Thr Gly Phe Ala Glu Ser  
130 135 140  
Ile Ser Asp Leu Leu Gly Leu Gly Asn Ile Trp Ala Val Arg Gly Ile  
145 150 155 160  
Ser Val Ala Val Leu Leu Ala Leu Leu Gly Ile Asn Leu Ala Gly Val  
165 170 175  
Lys Trp Ile Ile Arg Leu Gln Leu Leu Leu Leu Phe Leu Leu Ala Val  
180 185 190  
Ser Thr Leu Asp Phe Val Val Gly Ser Phe Thr His Leu Asp Pro Glu  
195 200 205  
His Gly Phe Ile Gly Tyr Ser Pro Glu Leu Leu Gln Asn Asn Thr Leu  
210 215 220  
Pro Asp Tyr Ser Pro Gly Glu Ser Phe Phe Thr Val Phe Gly Val Phe  
225 230 235 240  
Phe Pro Ala Ala Thr Gly Val Met Ala Gly Phe Asn Met Gly Gly Asp  
245 250 255  
Leu Arg Glu Pro Ala Ala Ser Ile Pro Leu Gly Ser Leu Ala Ala Val  
260 265 270  
Gly Ile Ser Trp Phe Leu Tyr Ile Val Phe Val Phe Leu Leu Gly Ala

275	280	285
Ile Cys Thr Arg Glu Ala Leu Arg Tyr Asp Phe Leu Ile Ala Glu Lys		
290	295	300
Val Ser Leu Met Gly Phe Leu Phe Leu Leu Gly Leu Tyr Ile Ser Ser		
305	310	315
Leu Ala Ser Cys Met Gly Gly Leu Tyr Gly Ala Pro Arg Ile Leu Gln		
325	330	335
Cys Ile Ala Gln Glu Lys Val Ile Pro Ala Leu Ala Cys Leu Gly Gln		
340	345	350
Gly Lys Gly Pro Asn Lys Thr Pro Val Ala Ala Ile Cys Leu Thr Ser		
355	360	365
Leu Val Thr Met Ala Phe Val Phe Val Gly Gln Val Asn Val Leu Ala		
370	375	380
Pro Ile Val Thr Ile Asn Phe Met Leu Thr Tyr Val Ala Val Asp Tyr		
385	390	395
Ser Tyr Phe Ser Leu Ser Met Cys Ser Cys Ser Leu Thr Pro Val Pro		
405	410	415
Glu Pro Val Leu Arg Glu Gly Ala Glu Gly Leu His Cys Ser Glu His		
420	425	430
Leu Leu Leu Glu Lys Ala Pro Ser Tyr Gly Ser Glu Gly Pro Ala Gln		
435	440	445
Arg Val Leu Glu Gly Thr Leu Leu Glu Phe Thr Lys Asp Met Asp Gln		
450	455	460
Leu Leu Gln Leu Thr Arg Lys Leu Glu Ser Ser Gln Pro Arg Gln Gly		
465	470	475
Glu Gly Asn Arg Thr Pro Glu Ser Gln Lys Arg Lys Ser Lys Lys Ala		
485	490	495
Thr Lys Gln Thr Leu Gln Asp Ser Phe Leu Leu Asp Leu Lys Ser Pro		
500	505	510

Pro Ser Phe Pro Val Glu Ile Ser Asp Arg Leu Pro Ala Ala Ser Trp  
515 520 525  
Glu Gly Gln Glu Ser Cys Trp Asn Lys Gln Thr Ser Lys Ser Glu Gly  
530 535 540  
Thr Gln Pro Glu Gly Thr Tyr Gly Glu Gln Leu Val Pro Glu Leu Cys  
545 550 555 560  
Asn Gln Ser Glu Ser Ser Gly Glu Asp Phe Phe Leu Lys Ser Arg Leu  
565 570 575  
Gln Glu Gln Asp Val Trp Arg Arg Ser Thr Ser Phe Tyr Thr His Met  
580 585 590  
Cys Asn Pro Trp Val Ser Pro Leu Gly Ala Val Gly Ser Leu Leu Ile  
595 600 605  
Met Phe Val Ile Gln Trp Val Tyr Thr Leu Val Asn Met Gly Val Ala  
610 615 620  
Ala Ile Val Tyr Phe Tyr Ile Gly Arg Ala Ser Pro Gly Leu His Leu  
625 630 635 640  
Gly Ser Ala Ser Asn Phe Ser Phe Phe Arg Trp Met Arg Ser Leu Leu  
645 650 655  
Leu Pro Ser Cys Arg Ser Leu Gln Ser Pro Gln Glu Gln Ile Ile Leu  
660 665 670  
Ala Pro Ser Leu Ala Lys Val Asp Met Glu Met Thr Gln Leu Thr Gln  
675 680 685  
Glu Asn Ala Asp Phe Ala Thr Arg Asp Arg Tyr His His Ser Ser Leu  
690 695 700  
Val Asn Arg Glu Gln Leu Met Pro His Tyr  
705 710

&lt;210&gt; 3195

&lt;211&gt; 821

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3195

Met Ala Lys Phe Ala Leu Asn Gln Asn Leu Pro Asp Leu Gly Gly Pro

1 5 10 15

Arg Leu Cys Pro Val Pro Ala Ala Gly Gly Ala Arg Ser Pro Ser Ser

20 25 30

Pro Tyr Ser Val Glu Thr Pro Tyr Gly Phe His Leu Asp Leu Asp Phe

35 40 45

Leu Lys Tyr Ile Glu Glu Leu Glu Arg Gly Pro Ala Ala Arg Arg Ala

50 55 60

Pro Gly Pro Pro Thr Ser Arg Arg Pro Arg Ala Pro Arg Pro Gly Leu

65 70 75 80

Ala Gly Ala Arg Ser Pro Gly Ala Trp Thr Ser Ser Glu Ser Leu Ala

85 90 95

Ser Asp Asp Gly Gly Ala Pro Gly Ile Leu Ser Gln Gly Ala Pro Ser

100 105 110

Gly Leu Leu Met Gln Pro Leu Ser Pro Arg Ala Pro Val Arg Asn Pro

115 120 125

Arg Val Glu His Thr Leu Arg Glu Thr Ser Arg Arg Leu Glu Leu Ala

130 135 140

Gln Thr His Glu Arg Ala Pro Ser Pro Gly Arg Gly Val Pro Arg Ser

145 150 155 160

Pro Arg Gly Ser Gly Arg Ser Ser Pro Ala Pro Asn Leu Ala Pro Ala

165 170 175

Ser Pro Gly Pro Ala Gln Leu Gln Leu Val Arg Glu Gln Met Ala Ala

180 185 190

Ala Leu Arg Arg Leu Arg Glu Leu Glu Asp Gln Ala Arg Thr Leu Pro  
195 200 205  
Glu Leu Gln Glu Gln Val Arg Ala Leu Arg Ala Glu Lys Ala Arg Leu  
210 215 220  
Leu Ala Gly Arg Ala Gln Pro Glu Pro Asp Gly Glu Ala Glu Thr Arg  
225 230 235 240  
Pro Asp Lys Leu Ala Gln Leu Arg Arg Leu Thr Glu Arg Leu Ala Thr  
245 250 255  
Ser Glu Arg Gly Gly Arg Ala Arg Ala Ser Pro Arg Ala Asp Ser Pro  
260 265 270  
Asp Gly Leu Ala Ala Gly Arg Ser Glu Gly Ala Leu Gln Val Leu Tyr  
275 280 285  
Gly Glu Val Gly Ser Leu Asp Gly Thr Pro Gln Thr Arg Glu Val Ala  
290 295 300  
Ala Glu Ala Val Pro Glu Thr Arg Glu Ala Gly Ala Gln Ala Val Pro  
305 310 315 320  
Glu Thr Arg Glu Ala Gly Val Glu Ala Ala Pro Glu Thr Val Glu Ala  
325 330 335  
Asp Ala Trp Val Thr Glu Ala Leu Leu Gly Leu Pro Ala Ala Ala Glu  
340 345 350  
Arg Glu Leu Glu Leu Leu Arg Ala Ser Leu Glu His Gln Arg Gly Val  
355 360 365  
Ser Glu Leu Leu Arg Gly Arg Leu Arg Glu Leu Glu Glu Ala Arg Glu  
370 375 380  
Ala Ala Glu Glu Ala Ala Ala Gly Ala Arg Ala Gln Leu Arg Glu Ala  
385 390 395 400  
Thr Thr Gln Thr Pro Trp Ser Cys Ala Glu Lys Ala Ala Gln Thr Glu  
405 410 415  
Ser Pro Ala Glu Ala Pro Ser Leu Thr Gln Glu Ser Ser Pro Gly Ser



420	425	430
Met Asp Gly Asp Arg Ala Val	Ala Pro Ala Gly Ile Leu Lys Ser Ile	
435	440	445
Met Lys Lys Arg Asp Gly Thr Pro Gly Ala Gln Pro Ser Ser Gly Pro		
450	455	460
Lys Ser Leu Gln Phe Val Gly Val Leu Asn Gly Glu Tyr Glu Ser Ser		
465	470	475
Ser Ser Glu Asp Thr Ser Asp Ser Asp Gly Asp Ser Glu Asn Gly Gly		
485	490	495
Ala Glu Pro Pro Gly Ser Ser Ser Gly Ser Gly Asp Asp Ser Gly Gly		
500	505	510
Gly Ser Asp Ser Gly Thr Pro Gly Pro Pro Ser Gly Gly Asp Ile Arg		
515	520	525
Asp Pro Glu Pro Glu Ala Glu Ala Glu Pro Gln Gln Val Ala Gln Gly		
530	535	540
Arg Cys Glu Leu Ser Pro Arg Leu Arg Glu Ala Cys Val Ala Leu Gln		
545	550	555
Arg Gln Leu Ser Arg Pro Arg Gly Val Ala Ser Asp Gly Gly Ala Val		
565	570	575
Arg Leu Val Ala Gln Glu Trp Phe Arg Val Ser Ser Gln Arg Arg Ser		
580	585	590
Gln Ala Glu Pro Val Ala Arg Met Leu Glu Gly Val Arg Arg Leu Gly		
595	600	605
Pro Glu Leu Leu Ala His Val Val Asn Leu Ala Asp Gly Asn Gly Asn		
610	615	620
Thr Ala Leu His Tyr Ser Val Ser His Gly Asn Leu Ala Ile Ala Ser		
625	630	635
Leu Leu Leu Asp Thr Gly Ala Cys Glu Val Asn Arg Gln Asn Arg Ala		
645	650	655

Gly Tyr Ser Ala Leu Met Leu Ala Ala Leu Thr Ser Val Arg Gln Glu  
660 665 670

Glu Glu Asp Met Ala Val Val Gln Arg Leu Phe Cys Met Gly Asp Val  
675 680 685

Asn Ala Lys Ala Ser Gln Thr Gly Gln Thr Ala Leu Met Leu Ala Ile  
690 695 700

Ser His Gly Arg Gln Asp Met Val Ala Thr Leu Leu Ala Cys Gly Ala  
705 710 715 720

Asp Val Asn Ala Gln Asp Ala Asp Gly Ala Thr Ala Leu Met Cys Ala  
725 730 735

Ser Glu Tyr Gly Arg Leu Asp Thr Val Arg Leu Leu Leu Thr Gln Pro  
740 745 750

Gly Cys Asp Pro Ala Ile Leu Asp Asn Glu Gly Thr Ser Ala Leu Ala  
755 760 765

Ile Ala Leu Glu Ala Glu Gln Asp Glu Val Ala Ala Leu Leu His Ala  
770 775 780

His Leu Ser Ser Gly Gln Pro Asp Thr Gln Ser Glu Ser Pro Pro Gly  
785 790 795 800

Ser Gln Thr Ala Thr Pro Gly Glu Gly Glu Cys Gly Asp Asn Gly Glu  
805 810 815

Asn Pro Gln Val Gln  
820

<210> 3196

<211> 121

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3196

Met Gly Gly Leu Ser Ser Pro Ala His Ser Ser Ile Pro Ser Trp Tyr  
 1 5 10 15  
 Asn Leu Gly Ser Pro Pro Met Phe Val Cys Glu Gly Cys Cys Asp Lys  
 20 25 30  
 Leu His Ala Cys Arg Leu Gln Thr Arg Glu Arg Phe Ser Phe Thr Val  
 35 40 45  
 Val Glu Ser Asp Ala Arg Thr Gln Gly Val Gly Arg Ala Ser Phe Pro  
 50 55 60  
 Pro Glu Ala Arg Glu Asn Leu Ser Ser Leu Phe Gln Leu Leu Trp Leu  
 65 70 75 80  
 Leu Ala Ile Pro Gly Ile Ser Cys Leu Val Ala Ala Ser Leu Gln Ser  
 85 90 95  
 Leu Pro Leu Pro Ser Arg Pro Leu Leu Leu Gly Asp Phe Ser Ser Val  
 100 105 110  
 Ser Tyr Asn Asp Thr Tyr His Trp Thr  
 115 120

&lt;210&gt; 3197

&lt;211&gt; 515

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3197

Met Ala Thr Ser Thr Gly Arg Trp Leu Leu Leu Arg Leu Ala Leu Phe  
 1 5 10 15  
 Gly Phe Leu Trp Glu Ala Ser Gly Gly Leu Asp Ser Gly Ala Ser Arg  
 20 25 30

Asp Asp Asp Leu Leu Leu Pro Tyr Pro Arg Ala Arg Ala Arg Leu Pro  
35 40 45  
Arg Asp Cys Thr Arg Val Arg Ala Gly Asn Arg Glu His Glu Ser Trp  
50 55 60  
Pro Pro Pro Pro Ala Thr Pro Gly Ala Gly Gly Leu Ala Val Arg Thr  
65 70 75 80  
Phe Val Ser His Phe Arg Asp Arg Ala Val Ala Gly His Leu Thr Arg  
85 90 95  
Ala Val Glu Pro Leu Arg Thr Phe Ser Val Leu Glu Pro Gly Gly Pro  
100 105 110  
Gly Gly Cys Ala Ala Arg Arg Arg Ala Thr Val Glu Glu Thr Ala Arg  
115 120 125  
Ala Ala Asp Cys Arg Val Ala Gln Asn Gly Gly Phe Phe Arg Met Asn  
130 135 140  
Ser Gly Glu Cys Leu Gly Asn Val Val Ser Asp Glu Arg Arg Val Ser  
145 150 155 160  
Ser Ser Gly Gly Leu Gln Asn Ala Gln Phe Gly Ile Arg Arg Asp Gly  
165 170 175  
Thr Leu Val Thr Gly Tyr Leu Ser Glu Glu Glu Val Leu Asp Thr Glu  
180 185 190  
Asn Pro Phe Val Gln Leu Leu Ser Gly Val Val Trp Leu Ile Arg Asn  
195 200 205  
Gly Ser Ile Tyr Ile Asn Glu Ser Gln Ala Thr Glu Cys Asp Glu Thr  
210 215 220  
Gln Glu Thr Gly Ser Phe Ser Lys Phe Val Asn Val Ile Ser Ala Arg  
225 230 235 240  
Thr Ala Ile Gly His Asp Arg Lys Gly Gln Leu Val Leu Phe His Ala  
245 250 255  
Asp Gly Gln Thr Glu Gln Arg Gly Ile Asn Leu Trp Glu Met Ala Glu

260	265	270
Phe Leu Leu Lys Gln Asp Val Val Asn Ala Ile Asn Leu Asp Gly Gly		
275	280	285
Gly Ser Ala Thr Phe Val Leu Asn Gly Thr Leu Ala Ser Tyr Pro Ser		
290	295	300
Asp His Cys Gln Asp Asn Met Trp Arg Cys Pro Arg Gln Val Ser Thr		
305	310	315
Val Val Cys Val His Glu Pro Arg Cys Gln Pro Pro Asp Cys His Gly		
325	330	335
His Gly Thr Cys Val Asp Gly His Cys Gln Cys Thr Gly His Phe Trp		
340	345	350
Arg Gly Pro Gly Cys Asp Glu Leu Asp Cys Gly Pro Ser Asn Cys Ser		
355	360	365
Gln His Gly Leu Cys Thr Glu Thr Gly Cys Arg Cys Asp Ala Gly Trp		
370	375	380
Thr Gly Ser Asn Cys Ser Glu Glu Cys Pro Leu Gly Trp His Gly Pro		
385	390	395
Gly Cys Gln Arg Pro Cys Lys Cys Glu His His Cys Pro Cys Asp Pro		
405	410	415
Lys Thr Gly Asn Cys Ser Val Ser Arg Val Lys Gln Cys Leu Gln Pro		
420	425	430
Pro Glu Ala Thr Leu Arg Ala Gly Glu Leu Ser Phe Phe Thr Arg Thr		
435	440	445
Ala Trp Leu Ala Leu Thr Leu Ala Leu Ala Phe Leu Leu Leu Ile Ser		
450	455	460
Thr Ala Ala Asn Leu Ser Leu Leu Leu Ser Arg Ala Glu Arg Asn Arg		
465	470	475
Arg Leu His Gly Asp Tyr Ala Tyr His Pro Leu Gln Glu Met Asn Gly		
485	490	495

Glu Pro Leu Ala Ala Glu Lys Glu Gln Pro Gly Gly Ala His Asn Pro

500

505

510

Phe Lys Asp

515

<210> 3198

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3198

Met Leu Leu His Tyr Ser Leu Gly Asn Arg Val Arg Leu His Leu Lys

1

5

10

15

Lys Lys Lys Gly Pro Pro Gly Ala Pro Gly Phe Ile Thr Asn Gly Leu

20

25

30

Thr Met Ala Thr Arg Val Leu Phe Gln Ala Leu Val Ser Leu Ser Pro

35

40

45

Met Leu Thr Ser Ser Gly His Lys Ala Ala Ser Ser Ile Thr Gly Ser

50

55

60

Ser Ser Pro Pro Arg Ser Cys Ser Arg His Leu Asp Cys Leu Pro Ser

65

70

75

80

Thr Phe Leu Pro Pro Pro Ser Ala Gln Pro Lys Gly His Phe Leu Thr

85

90

95

Glu Ala Val Pro Glu Pro Gln Ser Lys Leu His Pro His Lys Asp Thr

100

105

110

Lys Met

&lt;210&gt; 3199

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3199

Met Glu Ala Trp His Ala Gly Arg Gly Asn Arg Pro Thr Pro Pro Ser

1 5 10 15

Ala Leu Ser Pro Ala Arg Lys Arg Gly Lys Asn Cys Asn Ser Ser Gly

20 25 30

Lys Leu Ser Ser Lys Ser Leu Pro Thr Ser Asp Asp Tyr Glu Leu Gly

35 40 45

Ala Gly Ile Arg Lys Arg His Lys Gly Pro Lys Glu Glu His Asn Ala

50 55 60

Leu Ile Gly Thr Gly Lys Ala Arg Glu Arg Asn Gln Thr Trp Asp Glu

65 70 75 80

His Glu Ala Ser Ser Lys Phe Ile Ser Gln Leu Lys Ile Lys Lys Lys

85 90 95

Lys Thr Asp Ser Asp Gln Glu Gln Leu Ala Ser Lys Leu Asp Lys Gly

100 105 110

Pro Leu Pro His Gln Ala Gly Gln Val Glu Val Thr Leu Gln Val Phe

115 120 125

Arg Gln Cys Trp Gly Glu Ile Lys Asn Trp Gln Gly Leu Gln Gln Val

130 135 140

Leu Asn Ser Leu

145

&lt;210&gt; 3200

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3200

Met Gln Pro Leu Glu Asn Phe Thr Val Pro Ser Cys Gln Asn Glu Asn

1 5 10 15

Lys Lys Met Arg Lys Leu Lys Gln Lys Glu Ala Lys Gln Leu Asn Asp

20 25 30

Thr Leu Gln Gly Val Cys Pro His Cys Trp Phe Ser Arg Pro Leu Pro

35 40 45

Ala Tyr Ser Ser Ser Leu Phe Ser Ser His Ala Ile Leu Gln Lys Asp

50 55 60

Gly His Val Pro Asp Ser Ser Val Cys Arg Pro Thr Ala Val Leu Tyr

65 70 75 80

Arg Ile Cys Leu Cys Met Gln Val Gly Leu Phe Ile Arg Lys Asn Pro

85 90 95

Ile Ser His Ala Ile Glu Tyr Glu Lys Ala Thr Phe Arg Gly Cys Trp

100 105 110

Lys Thr Tyr Phe

115

&lt;210&gt; 3201

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 3201

Met Ser His Val Pro Cys Asn Ile Leu Glu Thr Ile Leu Gly Gly Asp

1 5 10 15

Ser Trp Pro Thr Asn Pro His Lys His Trp His Cys Leu His Pro Gly

20 25 30

Gln Asp Val Pro Leu Arg Pro Glu Thr Ala Leu Leu Leu Thr Leu Pro

35 40 45

Met Phe Trp Ser Ala Ser Ser Pro Pro Leu Gly Leu Met Arg Ser Pro

50 55 60

Arg Pro Thr Leu Arg Pro Ala Pro Val Arg Phe Leu Val Leu Asn Arg

65 70 75 80

Ser Glu Gly Gln Glu Asn Pro Val Leu Ile Tyr Ala Thr Met Arg Glu

85 90 95

Met Gly Val Pro Glu Val Arg Ser Ala Pro Tyr Phe Val Pro Gly Arg

100 105 110

Gly Pro Trp Asp Ser Gln Thr Val Arg Thr Leu Gly Val Ser Val Met

115 120 125

Gly Arg Gly Cys Gly Met Leu Leu Trp Phe Gly Cys Asp Pro Thr

130 135 140

&lt;210&gt; 3202

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3202

Met Gln Ser Val Asp Ser Met Leu Gly Thr Val Gly Gly Cys Gly Gly

1 5 10 15

Gly Glu Ala Ala Ser Thr Phe Ser Lys Asp Pro Ser Gly Cys Cys Val  
                     20                    25                    30  
 Gly Asn Asp Cys Arg Asp Gly Gly Arg Gly Leu Glu Arg Arg His Gly  
                     35                    40                    45  
 Arg Trp Ser Arg Gly Glu Gly Gly Glu Ser Gly Leu Cys Ser Gly Gly  
                     50                    55                    60  
 Gln Met Ala Ser Glu Ile Glu Tyr Trp Asp Gly Leu Ala Ile Ser Val  
                     65                    70                    75                    80  
 Met Glu Val Glu Lys Ala Phe Gly Ser Thr Asn Val Leu Trp Lys Thr  
                                     85                    90                    95  
 Glu Pro Phe Ser Leu Trp Ala Cys Thr Ala Ala Cys Pro Pro Ser Leu  
                     100                    105                    110  
 Ser Pro Thr Leu Leu Ala Leu Gly Leu Pro Arg Asp Gly Lys Glu Leu  
                     115                    120                    125  
 Ala Glu Gln Gly Ser Leu Trp Thr Val Leu Glu Pro Gly Gly Asp Trp  
                     130                    135                    140  
 Ser His Ser Gln Ser Gln Leu Gly Thr Pro Gly Arg Gly Lys Gly Ala  
                     145                    150                    155                    160  
 Leu Gly Phe

<210> 3203

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3203

Met Ala Pro Cys Asp Leu Val Pro Ala Thr Ser Ser Ile Ser Trp Pro

1	5	10	15
Phe Thr Val Val Phe Leu Leu Phe Val Asn Met Pro Ala Leu Phe Trp			
20	25	30	
Ser Leu Ser Leu His Trp Leu Phe Cys Gln Thr Gln Ala Leu Pro Met			
35	40	45	
Ala Pro Cys His Ser Ser Val Ser Pro Val Phe Ala Glu Glu Pro Ser			
50	55	60	
Leu Thr Ile Leu Phe Lys Ile Ala Pro Ile Pro His Leu Ser His Tyr			
65	70	75	80
Leu Leu His Phe Val Leu Phe Met Thr His Leu Thr Asn Leu Ile Cys			
85	90	95	
Met Ser Leu Pro Gly Ile His Leu Arg Leu Thr Pro His Leu His Arg			
100	105	110	
His			

&lt;210&gt; 3204

&lt;211&gt; 886

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3204

Met Asp Ala Tyr Ala Leu Ala Pro Tyr Ala Gly Ala Gly Pro Leu Val			
1	5	10	15
Gly Val Pro Gly Val Gly Ala Pro Thr Pro Phe Ser Phe Pro Lys Arg			
20	25	30	
Ala His Leu Leu Phe Pro Pro Pro Arg Glu Glu Gly Leu Gly Phe Pro			
35	40	45	

Ser Phe Leu Asp Pro Asp Arg His Phe Leu Ser Ala Phe Arg Arg Glu  
50 55 60  
Glu Pro Pro Arg Met Pro Gly Gly Ala Leu Glu Pro His Ala Gly Leu  
65 70 75 80  
Arg Pro Leu Ser Arg Arg Leu Glu Ala Glu Ala Gly Pro Ala Gly Glu  
85 90 95  
Leu Ala Gly Ala Arg Gly Phe Phe Gln Ala Arg His Leu Glu Met Asp  
100 105 110  
Ala Phe Lys Arg His Ser Phe Ala Thr Glu Gly Ala Gly Ala Val Glu  
115 120 125  
Asn Phe Ala Ala Ala Arg Gln Val Ser Arg Gln Thr Phe Leu Ser His  
130 135 140  
Gly Asp Asp Phe Arg Phe Gln Thr Ser His Phe His Arg Asp Gln Leu  
145 150 155 160  
Tyr Gln Gln Gln Tyr Gln Trp Asp Pro Gln Leu Thr Pro Ala Arg Pro  
165 170 175  
Gln Gly Leu Phe Glu Lys Leu Arg Gly Gly Arg Ala Gly Phe Ala Asp  
180 185 190  
Pro Asp Asp Phe Thr Leu Gly Ala Gly Pro Arg Phe Pro Glu Leu Gly  
195 200 205  
Pro Asp Gly His Gln Arg Leu Asp Tyr Val Pro Ser Ser Ala Ser Arg  
210 215 220  
Glu Val Arg His Gly Ser Asp Pro Ala Phe Ala Pro Gly Pro Arg Gly  
225 230 235 240  
Leu Glu Pro Ser Gly Ala Pro Arg Pro Asn Leu Thr Gln Arg Phe Pro  
245 250 255  
Cys Gln Ala Ala Ala Arg Pro Gly Pro Asp Pro Ala Pro Glu Ala Glu  
260 265 270  
Pro Glu Arg Arg Gly Gly Pro Glu Gly Arg Ala Gly Leu Arg Arg Trp

275	280	285
Arg Leu Ala Ser Tyr Leu Ser Gly Cys His Gly Glu Asp Gly Gly Asp		
290	295	300
Asp Gly Leu Pro Ala Pro Met Val Ala Glu Ala Tyr Glu Asp Asp Val		
305	310	315
Leu Ala Pro Gly Gly Arg Ala Pro Ala Gly Asp Leu Leu Pro Ser Ala		
325	330	335
Phe Arg Val Pro Ala Ala Phe Pro Thr Lys Val Pro Val Pro Gly Pro		
340	345	350
Gly Ser Gly Gly Asn Gly Pro Glu Arg Glu Gly Pro Glu Glu Pro Gly		
355	360	365
Leu Ala Lys Gln Asp Ser Phe Arg Ser Arg Leu Asn Pro Leu Val Gln		
370	375	380
Arg Ser Ser Arg Leu Arg Ser Ser Leu Ile Phe Ser Thr Ser Gln Ala		
385	390	395
Glu Gly Ala Ala Gly Ala Ala Ala Ala Thr Glu Lys Val Gln Leu Leu		
405	410	415
His Lys Glu Gln Thr Val Ser Glu Thr Leu Gly Pro Gly Gly Glu Ala		
420	425	430
Val Arg Ser Ala Ala Ser Thr Lys Val Ala Glu Leu Leu Glu Lys Tyr		
435	440	445
Lys Gly Pro Ala Arg Asp Pro Gly Gly Gly Ala Gly Ala Ile Thr Val		
450	455	460
Ala Ser His Ser Lys Ala Val Val Ser Gln Ala Trp Arg Glu Glu Val		
465	470	475
Ala Ala Pro Gly Ala Val Gly Gly Glu Arg Arg Ser Leu Glu Ser Cys		
485	490	495
Leu Leu Asp Leu Arg Asp Ser Phe Ala Gln Gln Leu His Gln Glu Ala		
500	505	510

Glu Arg Gln Pro Gly Ala Ala Ser Leu Thr Ala Ala Gln Leu Leu Asp  
515 520 525  
Thr Leu Gly Arg Ser Gly Ser Asp Arg Leu Pro Ser Arg Phe Leu Ser  
530 535 540  
Ala Gln Ser His Ser Thr Ser Pro Gln Gly Leu Asp Ser Pro Leu Pro  
545 550 555 560  
Leu Glu Gly Ser Gly Ala His Gln Val Leu His Asn Glu Ser Lys Gly  
565 570 575  
Ser Pro Thr Ser Ala Tyr Pro Glu Arg Lys Gly Ser Pro Thr Pro Gly  
580 585 590  
Phe Ser Thr Arg Arg Gly Ser Pro Thr Thr Gly Phe Ile Glu Gln Lys  
595 600 605  
Gly Ser Pro Thr Ser Ala Tyr Pro Glu Arg Arg Gly Ser Pro Val Pro  
610 615 620  
Pro Val Pro Glu Arg Arg Ser Ser Pro Val Pro Pro Val Pro Glu Arg  
625 630 635 640  
Arg Gly Ser Leu Thr Leu Thr Ile Ser Gly Glu Ser Pro Lys Ala Gly  
645 650 655  
Pro Ala Glu Glu Gly Pro Ser Gly Pro Met Glu Val Leu Arg Lys Gly  
660 665 670  
Ser Leu Arg Leu Arg Gln Leu Leu Ser Pro Lys Gly Glu Arg Arg Met  
675 680 685  
Glu Asp Glu Gly Gly Phe Pro Val Pro Gln Glu Asn Gly Gln Pro Glu  
690 695 700  
Ser Pro Arg Arg Leu Ser Leu Gly Gln Gly Asp Ser Thr Glu Ala Ala  
705 710 715 720  
Thr Glu Glu Arg Gly Pro Arg Ala Arg Leu Ser Ser Ala Thr Ala Asn  
725 730 735  
Ala Leu Tyr Ser Ser Asn Leu Arg Asp Asp Thr Lys Ala Ile Leu Glu

740 745 750  
Gln Ile Ser Ala His Gly Gln Lys His Arg Ala Val Pro Ala Pro Ser  
755 760 765  
Pro Gly Pro Thr His Asn Ser Pro Glu Leu Gly Arg Pro Pro Ala Ala  
770 775 780  
Gly Val Leu Ala Pro Asp Met Ser Asp Lys Asp Lys Cys Ser Ala Ile  
785 790 795 800  
Phe Arg Ser Asp Ser Leu Gly Thr Gln Gly Arg Leu Ser Arg Thr Leu  
805 810 815  
Pro Ala Ser Ala Glu Glu Arg Asp Arg Leu Leu Arg Arg Met Glu Ser  
820 825 830  
Met Arg Lys Glu Lys Arg Val Tyr Ser Arg Phe Glu Val Phe Cys Lys  
835 840 845  
Lys Glu Glu Ala Ser Ser Pro Gly Ala Gly Glu Gly Pro Ala Glu Glu  
850 855 860  
Gly Thr Arg Asp Ser Lys Val Gly Lys Phe Val Pro Lys Ile Leu Gly  
865 870 875 880  
Thr Phe Lys Ser Lys Lys  
885

&lt;210&gt; 3205

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3205

Met Ser Trp Thr Val Ser Val Val Gln Ala Ser Arg Arg Val Ser Ser  
1 5 10 15

Ala Gly Ala Asn Phe Leu Ser Leu Cys Pro Ser Gln Ala Ala Arg Met  
                     20                    25                    30  
 Pro Leu Lys Gly Ala Trp Leu Phe Thr Pro Val Lys Ser Glu Leu Val  
                     35                    40                    45  
 Glu Arg Phe Thr Ser Glu Glu Pro Ala His His Ser Lys Val Ser Ile  
                     50                    55                    60  
 Ile Gly Thr Gly Ser Val Gly Met Ala Cys Ala Thr Ser Ile Leu Leu  
                     65                    70                    75                    80  
 Lys Gly Leu Ser Asp Glu Leu Ala Leu Val Asp Leu Asp Glu Gly Lys  
                     85                    90                    95  
 Leu Lys Gly Glu Thr Met Asp Leu Gln His Gly Ser Pro Phe Met Lys  
                     100                    105                    110  
 Thr Pro Asn Ile Val Cys Ser Lys Asp Tyr Leu Val Thr Ala Asn Ser  
                     115                    120                    125  
 Ser Leu Val Ile Ile Thr Glu Gly Ala Arg Gln Glu Lys Gly Glu Thr  
                     130                    135                    140  
 Arg Leu Asn Leu Val Gln Arg Asn Val Ala Ile Phe Lys Leu Met Ile  
                     145                    150                    155                    160  
 Ser Gly Ile Val Gln Tyr Ser Pro Leu Cys Lys Leu Ile Ile Val Ser  
                     165                    170                    175  
 Asn Pro Val Asp Asn Leu Thr Tyr Val Ala Trp Lys Leu Ser Ala Phe  
                     180                    185                    190  
 Ser Lys Asn Arg Val Ile Gly Ser Gly Cys Asn Leu Asp Thr Ala Arg  
                     195                    200                    205  
 Phe Cys Phe Leu Phe Gly Gln Lys Leu Gly Ile His Ser Glu Asn Cys  
                     210                    215                    220  
 His Gly Trp Ile Leu Gly Glu His Gly Asp Ser Ser Val Pro Val Trp  
                     225                    230                    235                    240  
 Ser Met Glu



&lt;210&gt; 3206

&lt;211&gt; 413

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3206

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Met Arg Ala Leu Thr Ala Asp Leu Arg Arg Val Ala Arg Arg Arg Arg
  1           5           10          15
His Glu Leu Ala Arg Ala Ser Ser Ser Glu Gly Met Gly Arg Trp Ile
      20           25           30
Gly Ile Leu Leu Ala Glu Thr Gly Ser Ser Thr Asp Pro Glu Ala Leu
      35           40           45
His Tyr Asp Tyr Ile Asp Val Glu Met Ser Ala Ser Val Ile Gln Thr
      50           55           60
Ala Lys Gln Thr Phe Cys Phe Met Asn Arg Arg Val Ile Ser Ala Asn
      65           70           75           80
Pro Tyr Leu Gly Gly Thr Ser Asn Gly Tyr Ala His Pro Ser Gly Thr
      85           90           95
Ala Leu His Tyr Asp Asp Val Pro Cys Ile Asn Gly Ser Trp Glu Pro
      100          105          110
Glu Asp Gly Phe Pro Ala Ser Cys Ser Arg Gly Leu Gly Glu Glu Val
      115          120          125
Leu Tyr Asp Asn Ala Gly Leu Tyr Asp Asn Leu Pro Pro Pro His Ile
      130          135          140
Phe Ala Arg Tyr Ser Pro Ala Asp Arg Lys Ala Ser Arg Leu Ser Ala
      145          150          155          160

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Asp Lys Leu Ser Ser Asn His Tyr Lys Tyr Pro Ala Ser Ala Gln Ser			
	165	170	175
Val Thr Asn Thr Ser Ser Val Gly Arg Ala Ser Leu Gly Leu Asn Ser			
	180	185	190
Gln Leu Lys Gly Lys Lys Pro Pro Met Ala Ser Asn Gly Val Thr Gly			
	195	200	205
Lys Gly Lys Thr Leu Ser Ser Gln Pro Lys Lys Ala Asp Pro Ala Ala			
	210	215	220
Val Val Lys Arg Thr Gly Ser Asn Ala Ala Gln Tyr Lys Tyr Gly Lys			
	225	230	235
Asn Arg Val Glu Ala Asp Ala Lys Arg Leu Gln Thr Lys Glu Glu Glu			
	245	250	255
Leu Leu Lys Arg Lys Glu Ala Leu Arg Asn Arg Leu Ala Gln Leu Arg			
	260	265	270
Lys Glu Arg Lys Asp Leu Arg Ala Ala Ile Glu Val Asn Ala Gly Arg			
	275	280	285
Lys Pro Gln Ala Ile Leu Glu Glu Lys Leu Lys Gln Leu Glu Glu Glu			
	290	295	300
Cys Arg Gln Lys Glu Ala Glu Arg Val Ser Leu Glu Leu Glu Leu Thr			
	305	310	315
Glu Val Lys Glu Ser Leu Lys Lys Ala Leu Ala Gly Gly Val Thr Leu			
	325	330	335
Gly Leu Ala Ile Glu Pro Lys Ser Gly Thr Ser Ser Pro Gln Ser Pro			
	340	345	350
Val Phe Arg His Arg Thr Leu Glu Asn Ser Pro Ile Ser Ser Cys Asp			
	355	360	365
Thr Ser Asp Thr Glu Gly Pro Val Pro Val Asn Ser Ala Ala Val Leu			
	370	375	380
Lys Lys Ser Gln Ala Ala Pro Gly Ser Ser Pro Cys Arg Gly His Val			

385                      390                      395                      400  
Leu Arg Lys Ala Lys Glu Trp Glu Leu Lys Asn Gly Thr  
                         405                      410

<210> 3207

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3207

Met Thr Asn Gly Gly Ser Ile Asn Ser Ser Thr His Leu Leu Asp Leu  
1                      5                      10                      15  
Leu Asp Glu Pro Ile Pro Gly Val Gly Thr Tyr Asp Asp Phe His Thr  
                         20                      25                      30  
Ile Asp Trp Val Gln Glu Lys Cys Lys Asp Arg Glu Arg His Arg Trp  
                         35                      40                      45  
Met Glu Ser Arg Cys Leu Gln Ala Gly Val Gln Arg Arg Asn Leu Gly  
                         50                      55                      60  
Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Gly Phe Ser Cys Phe Ser  
65                      70                      75                      80  
Leu Pro Ser Ser Trp Asp Tyr Arg Lys Leu Leu Thr Cys Gly Glu Leu  
                         85                      90                      95  
Lys Gln Lys Lys Thr Thr Met  
                         100

<210> 3208

<211> 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3208

Met Ala Asp Gly Gly Gly Gly Gly Ser Gly Gly Ala Gly Pro Ala Ser  
1 5 10 15  
Thr Arg Ala Ser Gly Gly Gly Gly Pro Ile Asn Pro Ala Ser Leu Pro  
20 25 30  
Pro Gly Asp Pro Gln Leu Ile Ala Ile Ile Val Gly Gln Pro Lys Ser  
35 40 45  
Arg Gly Leu Phe Asp Ser Phe Arg Arg Asp Cys Lys Ala Asp Val Asp  
50 55 60  
Thr Lys Pro Ala Tyr Gln Asn Leu Ser Gln Lys Ala Asp Asn Phe Val  
65 70 75 80  
Ser Thr His Leu Asp Lys Gln Glu Trp Asn Pro Pro Ala Asn Asp Asn  
85 90 95  
Gln Leu His Asp Gly Leu Arg Gln Ser Val Val Gln Ser Gly Arg Ser  
100 105 110  
Glu Ala Gly Val Asp Arg Ile Ser Ser Gln Val Val Asp Pro Lys Leu  
115 120 125  
Asn His Ile Phe Arg Pro Gln Ile Glu Gln Ile Ile His Glu Phe Leu  
130 135 140  
Val Ala Gln Lys Glu Ala Ala Val Pro Ala Leu Pro Pro Glu Pro Glu  
145 150 155 160  
Gly Gln Asp Pro Pro Ala Pro Ser Gln Asp Thr Ser  
165 170

&lt;210&gt; 3209

&lt;211&gt; 459

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3209

Met Glu Pro Ser Thr Cys Arg Thr Met Glu Ser Glu Glu Asp Tyr Val

1 5 10 15

Glu Glu Lys Glu Ser Glu Lys Cys Val Lys Glu Gly Val Thr Asn Pro

20 25 30

Ser Asn Ser Ser Gln Gln Ala Leu Leu Lys Ala Asp Tyr Lys Ala Leu

35 40 45

Lys Asn Gly Val Pro Ser Pro Ile Met Ala Thr Lys Ile Pro Lys Lys

50 55 60

Val Ile Ala Pro Val Asp Thr Gly Asp Leu Glu Ala Gly Arg Arg Lys

65 70 75 80

Arg Arg Arg Lys Arg Arg Ser Leu Ala Ile Asn Leu Thr Asn Cys Lys

85 90 95

Tyr Glu Ser Val Arg Arg Ala Ala Gln Met Cys Ser Leu Lys Glu Val

100 105 110

Gly Glu Asp Glu Glu Trp Thr Leu Tyr Trp Thr Asp Cys Ala Val Ser

115 120 125

Leu Glu Arg Val Met Asp Met Lys Arg Phe Gln Lys Ile Asn His Phe

130 135 140

Pro Gly Met Thr Glu Ile Cys Arg Lys Asp Leu Leu Ala Arg Asn Leu

145 150 155 160

Asn Arg Met Tyr Lys Leu Tyr Pro Ser Glu Tyr Asn Ile Phe Pro Arg

165 170 175

Thr Trp Cys Leu Pro Ala Asp Tyr Gly Asp Phe Gln Ser Tyr Gly Arg

180 185 190

Gln Arg Lys Ala Arg Thr Tyr Ile Cys Lys Pro Asp Ser Gly Cys Gln  
 195 200 205  
 Gly Arg Gly Ile Phe Ile Thr Arg Asn Pro Arg Glu Ile Lys Pro Gly  
 210 215 220  
 Glu His Met Ile Cys Gln Gln Tyr Ile Ser Lys Pro Leu Leu Ile Asp  
 225 230 235 240  
 Gly Phe Lys Phe Asp Met Arg Val Tyr Val Leu Ile Thr Ser Cys Asp  
 245 250 255  
 Pro Leu Arg Ile Phe Thr Tyr Glu Glu Gly Leu Ala Arg Phe Ala Thr  
 260 265 270  
 Thr Pro Tyr Met Glu Pro Ser His Asn Asn Leu Asp Asn Val Cys Met  
 275 280 285  
 His Leu Thr Asn Tyr Ala Ile Asn Lys His Asn Glu Asn Phe Val Arg  
 290 295 300  
 Asp Gly Ala Val Gly Ser Lys Arg Lys Leu Ser Thr Leu Asn Ile Trp  
 305 310 315 320  
 Leu Gln Glu His Ser Tyr Asn Pro Gly Glu Leu Trp Gly Asp Ile Glu  
 325 330 335  
 Asp Ile Ile Ile Lys Thr Ile Ile Ser Ala His Ser Val Leu Arg His  
 340 345 350  
 Asn Tyr Arg Thr Cys Phe Pro Gln Tyr Leu Asn Gly Gly Thr Cys Ala  
 355 360 365  
 Cys Phe Glu Ile Leu Gly Phe Asp Ile Leu Leu Asp His Lys Leu Lys  
 370 375 380  
 Pro Trp Leu Leu Glu Val Asn His Ser Pro Ser Phe Thr Thr Asp Ser  
 385 390 395 400  
 Cys Leu Asp Gln Glu Val Lys Asp Ala Leu Leu Cys Asp Ala Met Thr  
 405 410 415  
 Leu Val Asn Leu Arg Gly Cys Asp Lys Arg Lys Val Met Glu Glu Asp

420                      425                      430  
 Lys Arg Arg Val Lys Glu Arg Leu Phe Gln Cys Tyr Arg Gln Pro Arg  
 435                      440                      445  
 Glu Ser Arg Cys Ala Arg Cys Leu Ala Cys Val  
 450                      455

<210> 3210

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3210

Met Gly Val Pro Thr Ala Arg Gly Gly Arg Glu Asp Ser Ser Gln Ser  
 1                      5                      10                      15  
 Pro Pro Ser Arg Gly Cys Leu Pro Leu Leu Arg Trp Gly Ser Ser Glu  
 20                      25                      30  
 Pro Gly Gly Glu Glu Gly Leu Pro Leu Ser Pro Cys Leu Ala Gly Gly  
 35                      40                      45  
 Ala Ser Ala Pro Ser Asp Gly Asp Pro Lys Ser Lys Gly Gly Lys Arg  
 50                      55                      60  
 Gly Ser Leu Ser Val Pro Ala Ser Arg Gly Val Pro Pro Pro Leu Arg  
 65                      70                      75                      80  
 Trp Gly Cys Lys Glu Pro Gly Glu Glu Arg Gly Arg Phe Ala Val Pro  
 85                      90                      95  
 Ala Ser Arg Gly Leu Pro Pro Pro Leu Arg Trp Trp Ser Gln Glu Pro  
 100                      105                      110  
 Gly Gly Glu Glu Gly Leu Ala Leu Ser Pro Arg Leu Val Gly Gly Ala  
 115                      120                      125

Ser Pro Thr Leu Arg Trp Glu Ser Gln Glu Pro Gly Gly Lys Arg Gly  
 130 135 140  
 Trp Ile Ser Ala Ile Thr Lys Trp Gly Ala Phe Met Phe Arg Phe Cys  
 145 150 155 160  
 Pro Arg Ile Ser Leu Phe Ala Ser Cys Thr Ser Arg Ala Val Ala Ala  
 165 170 175  
 Lys Ala Leu Lys  
 180

<210> 3211

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3211

Met Phe Ala Gly His Val Gly Val Gly Arg Leu Val Ser Lys Lys Leu  
 1 5 10 15  
 Gln Ile Pro Pro Ser Gln Ala Trp Thr Phe Leu Ser Ala Leu Asn Gln  
 20 25 30  
 Val Thr Pro Ala Glu Val Ser Cys Ser Leu Ser Ser Ser Leu Phe Pro  
 35 40 45  
 Leu Pro Ser Leu Ser Cys Val Gln Val Ser Cys Phe Asn Glu Leu Glu  
 50 55 60  
 Val Cys Ile His Pro Asp Gly Val Ile Pro Val Leu Thr Phe Leu Arg  
 65 70 75 80  
 Asp His Thr Asn Ala Gln Phe Lys Ser Leu Val Asp Leu Thr Ala Val  
 85 90 95  
 Asp Val Pro Thr Arg Gln Asn Arg Phe Glu Ile Val Tyr Asn Leu Leu





Gln Gln Gln Pro Val Arg Arg Thr Val Ser Gln Val Cys Pro Pro Pro  
 20 25 30  
 Arg Arg Pro Leu Thr Val Ala Asp Ile Arg Ser Gly Met Glu Asn Glu  
 35 40 45  
 Arg Leu Gly Val Val Arg Asp Ser Met Phe Gln Asn Pro Leu Ile Val  
 50 55 60  
 Lys Ala Ala Gly Pro Ala Ser Val Gly Thr Ser Tyr Ser Val Tyr Asp  
 65 70 75 80  
 Ser Ser Ala Val Gln Lys Val Ile Pro Ser Leu Ala Gly His His Ile  
 85 90 95  
 Lys Gly Gly Pro Gln Ala Glu Leu Gly Lys Pro Arg Glu Arg Ser Tyr  
 100 105 110  
 Ser Leu Pro Gly Ile Asn Phe Asn Tyr Gly Leu Tyr Ile Arg Gly Leu  
 115 120 125  
 Asp Gly Gly Val Pro Glu Ala Ile Gly Arg Trp Asn Val Phe Lys Gln  
 130 135 140  
 Gln Pro Thr Cys Pro His Glu Leu Thr Arg Asn Tyr Ile Ala Met Asn  
 145 150 155 160  
 Arg Gly Ala Val Lys Ala Gly Leu Val Thr Ala Arg Glu Asn Leu Leu  
 165 170 175  
 Tyr Arg Gln Leu Asn Asp Ile Arg Ile Ser Asp Gln Asp Asp Arg Arg  
 180 185 190  
 Met Lys Lys Glu Pro Pro Pro Leu Pro Pro Asn Met Thr Phe Gly Ile  
 195 200 205  
 Arg Ala Arg Pro Ser Thr Pro Phe Phe Asp Leu Leu Gln His Arg Tyr  
 210 215 220  
 Leu Gln Leu Trp Val Gln Glu Gln Lys Ala Thr Gln Lys Ala Ile Lys  
 225 230 235 240  
 Leu Glu Lys Lys Gln Lys Val Val Leu Gly Lys Leu Tyr Glu Thr Arg

	245		250		255
Ser Ser Gln Leu Arg Lys Tyr Lys Pro Pro Val Lys Leu Asp Thr Leu					
	260		265		270
Trp His Met Pro His Phe Gln Lys Val Gly Arg His Leu Asp Thr Phe					
	275		280		285
Pro Thr Glu Ala Asp Arg Gln Arg Ala Leu Lys Ala His Arg Glu Glu					
	290		295		300
Cys Ala Val Arg Gln Gly Thr Leu Arg Met Gly Asn Tyr Thr His Pro					
305		310		315	320

&lt;210&gt; 3213

&lt;211&gt; 572

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3213

Met Asp Asp Asp Tyr Glu Ala Tyr His Ser Leu Phe Leu Ser Leu Leu			
1	5	10	15
Gly Leu Cys Pro Ser Lys Thr Pro Ile Asn Glu Asn Ala Pro Val Phe			
	20	25	30
Asp Pro Glu Pro Val Phe Ala His Cys Phe Lys Gln Phe Gln Gln Lys			
	35	40	45
Asp Phe Arg Leu Pro Gln Thr Arg Arg Arg Ile Ile Met Val Pro Arg			
	50	55	60
Lys Glu Asp Gln Thr Pro Leu Asn Pro Ala Ser Gln Pro Gln Ala Pro			
	65	70	75
Pro Lys Pro Ile Pro Ser Phe Lys Val Leu Glu Ala Arg Asp Ile Gln			
	85	90	95

Glu Gln Pro Glu Asp Arg Lys Thr Trp Leu Ser Gln Arg Ser Lys Leu  
100 105 110  
Arg Gln Glu Leu Glu Ser Phe Gly Asp Val Lys Arg Trp Leu Glu Asn  
115 120 125  
Lys Pro Ser Ile Thr Pro Ser Glu Ala Lys Val Leu His Met Ile His  
130 135 140  
Glu Glu Gln Ser Ala Gln Pro Asn Ala Ser Gln Ala Thr Thr Arg Thr  
145 150 155 160  
Thr Arg Lys Lys Ala Pro Arg Leu Ser Arg Leu Ser Arg Gln Met Val  
165 170 175  
Pro Gln Leu Gln Leu Pro Glu Pro Pro Ala Leu Ser Val Met Tyr Ser  
180 185 190  
Tyr Leu His Ser Arg Lys Ile Lys Ile Leu Glu Ile Phe His Lys Val  
195 200 205  
Gly Gln Gly Glu Asn Gln Arg Ile Thr Arg Glu Glu Phe Ile Ala Ala  
210 215 220  
Val Lys Ala Val Gly Val Pro Leu Lys Asn Gln Glu Val Glu Asp Ile  
225 230 235 240  
Val Ile Tyr Leu Ser Ser Leu Gly Lys His Asn Thr Ile Thr Met Asp  
245 250 255  
Ile Leu Ala Asn Thr Tyr Lys Gln Trp Ser Met Ala Gln Gln Arg Ser  
260 265 270  
Ser Leu Ala Thr Ala Arg Glu His Tyr Ile Leu Ala Lys His Arg Asp  
275 280 285  
Ser Leu Lys Gly Pro Leu Lys Lys Gln Glu Val Asp Ser Ala Pro Gln  
290 295 300  
Leu Pro Lys Val Asp Leu Leu Thr Val Pro Ala Val Asp Thr Gln Met  
305 310 315 320  
Glu Thr Arg Pro Met Thr Leu Glu Glu Met Glu Glu Val Gly Lys Arg

	325		330		335
Tyr Arg Glu Trp Gln Arg Gln His Lys Leu Thr Ile Pro Ser Ile Gln					
	340		345		350
Tyr Thr Glu Gln Cys His Leu Val Arg Cys Gly Asn Arg His Phe Asp					
	355		360		365
Glu His Cys Leu Pro Ser Thr Ile His Gly Asp Met Arg Glu Leu Ile					
	370		375		380
Asp Ser Ala Arg Arg His Asn Phe Leu Val Tyr Leu Gln Cys Trp Lys					
385		390		395	400
Leu Cys Lys Ser Tyr Gly Leu Pro Leu Thr Glu Asp Thr Leu Met Lys					
	405		410		415
Ala Leu Leu Tyr Pro Gly Asp Lys Ile Ile Phe Gln Met Asp Lys Val					
	420		425		430
Cys Pro Ile Arg Gln Pro Gly Gly Tyr Tyr Ser Asp Trp Lys Val Phe					
	435		440		445
Ser Pro Asn Leu Ala Leu Leu Arg Ser Gln Gly Pro Gly Lys Ser Lys					
	450		455		460
Arg Thr Asp Lys Lys Thr Pro Lys Lys Ser Lys Lys Met Arg Phe Lys					
465		470		475	480
Glu Phe Glu Glu Phe Thr Arg Lys Leu Lys Val Lys Arg Ser Ser Gly					
	485		490		495
Leu Gln Gln Thr His Pro Asn Ser Phe Trp Pro Gly His Leu Leu Asp					
	500		505		510
Lys Leu Gln Leu Tyr Leu Pro Thr Val Ala Thr Asp Arg Ser Leu Ala					
	515		520		525
Leu Phe Ser Cys Val Gln His Gln Pro His Val Tyr Pro Ala Thr Tyr					
	530		535		540
His Pro Asp His Trp Trp Pro Leu Arg Asn Lys Asn Tyr Met Thr His					
545		550		555	560

Ala His Tyr Asp Ala Ala Lys Val Tyr Tyr Ile Asn

565

570

<210> 3214

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3214

Met Gly Val Pro Arg Phe Gly Gly Glu Glu Gly Leu Ala Val Ser Thr

1

5

10

15

Arg Leu Ala Gly Gly Ala Phe Pro Pro Cys Asp Gly Gly Pro Lys Cys

20

25

30

Gln Gly Gly Asn Thr Gly Trp Leu Ser Ile Leu Gly Ser Arg Gly Leu

35

40

45

Pro Pro Pro Thr Ala Met Gly Val Leu Arg Ala Arg Gly Glu Glu Gly

50

55

60

Leu Val Leu Ser Pro Cys Leu Met Gly Gly Ala Ser Arg Ser Ala Met

65

70

75

80

Gly Val Leu Arg Ala Ser Gly Gly Arg Gly Ala Gly Ser Gln Phe Leu

85

90

95

Pro Gly Gly Gly Cys Leu Pro Pro Ser Ala Val Gly Val Leu Arg Ala

100

105

110

Arg Gly Gly Arg Gly Ala Gly Cys Gln Ser Pro Pro Arg Gly Val Cys

115

120

125

Leu Pro Pro Leu Arg Trp

130

&lt;210&gt; 3215

&lt;211&gt; 541

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3215

Met Lys Ser Tyr Thr Pro Tyr Phe Ile Leu Leu Trp Ser Ala Val Gly

1 5 10 15

Ile Ala Lys Ala Ala Lys Ile Ile Ile Val Pro Pro Ile Met Phe Glu

20 25 30

Ser His Met Tyr Ile Phe Lys Thr Leu Ala Ser Ala Leu His Glu Arg

35 40 45

Gly His His Thr Val Phe Leu Leu Ser Glu Gly Arg Asp Ile Ala Pro

50 55 60

Ser Asn His Tyr Ser Leu Gln Arg Tyr Pro Gly Ile Phe Asn Ser Thr

65 70 75 80

Thr Ser Asp Ala Phe Leu Gln Ser Lys Met Arg Asn Ile Phe Ser Gly

85 90 95

Arg Leu Thr Ala Ile Glu Leu Phe Asp Ile Leu Asp His Tyr Thr Lys

100 105 110

Asn Cys Asp Leu Met Val Gly Asn His Ala Leu Ile Gln Gly Leu Lys

115 120 125

Lys Glu Lys Phe Asp Leu Leu Leu Val Asp Pro Asn Asp Met Cys Gly

130 135 140

Phe Val Ile Ala His Leu Leu Gly Val Lys Tyr Ala Val Phe Ser Thr

145 150 155 160

Gly Leu Trp Tyr Pro Ala Glu Val Gly Ala Pro Ala Pro Leu Ala Tyr

165 170 175

Val Pro Glu Phe Asn Ser Leu Leu Thr Asp Arg Met Asn Leu Leu Gln  
180 185 190  
Arg Met Lys Asn Thr Gly Val Tyr Leu Ile Ser Arg Leu Gly Val Ser  
195 200 205  
Phe Leu Val Leu Pro Lys Tyr Glu Arg Ile Met Gln Lys Tyr Asn Leu  
210 215 220  
Leu Pro Glu Lys Ser Met Tyr Asp Leu Val His Gly Ser Ser Leu Trp  
225 230 235 240  
Met Leu Cys Thr Asp Val Ala Leu Glu Phe Pro Arg Pro Thr Leu Pro  
245 250 255  
Asn Val Val Tyr Val Gly Gly Ile Leu Thr Lys Pro Ala Ser Pro Leu  
260 265 270  
Pro Glu Asp Leu Gln Arg Trp Val Asn Gly Ala Asn Glu His Gly Phe  
275 280 285  
Val Leu Val Ser Phe Gly Ala Gly Val Lys Tyr Leu Ser Glu Asp Ile  
290 295 300  
Ala Asn Lys Leu Ala Gly Ala Leu Gly Arg Leu Pro Gln Lys Val Ile  
305 310 315 320  
Trp Arg Phe Ser Gly Pro Lys Pro Lys Asn Leu Gly Asn Asn Thr Lys  
325 330 335  
Leu Ile Glu Trp Leu Pro Gln Asn Asp Leu Leu Gly His Ser Lys Ile  
340 345 350  
Lys Ala Phe Leu Ser His Gly Gly Leu Asn Ser Ile Phe Glu Thr Met  
355 360 365  
Tyr His Gly Val Pro Val Val Gly Ile Pro Leu Phe Gly Asp His Tyr  
370 375 380  
Asp Thr Met Thr Arg Val Gln Ala Lys Gly Met Gly Ile Leu Leu Glu  
385 390 395 400  
Trp Lys Thr Val Thr Glu Lys Glu Leu Tyr Glu Ala Leu Val Lys Val





Glu Val Gln Leu Ala Pro Pro Leu Pro Arg Gly Arg Ala Arg Arg Ser  
                   35                                  40                                  45  
 Pro Trp Ser Val Pro Ile Ser Leu Ser Ile Asp Arg Leu Glu Phe Asp  
                   50                                  55                                  60  
 Leu Leu Tyr Pro Ala Ile Lys Gly Asp Thr Ile Gln Leu Tyr Leu Gly  
                   65                                  70                                  75                                  80  
 Ala Lys Leu Leu Asp Ser Gln Gly Lys Val Thr Lys Trp Phe Asn Asn  
                                   85                                  90                                  95  
 Ser Ala Ala Ser Leu Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser  
                                   100                                  105                                  110  
 Leu Ile Val Ser Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu  
                                   115                                  120                                  125  
 Ser Pro Glu Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser  
                                   130                                  135                                  140  
 Ala His Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Leu Gln  
                   145                                  150                                  155                                  160

<210> 3217

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3217

Met Asn Lys Gly Glu Arg Leu Asn Gln Asp Gln Leu Asp Ala Val Ser  
           1                                  5                                  10                                  15  
 Lys Tyr Gln Glu Val Thr Asn Asn Leu Glu Phe Ala Lys Glu Leu Gln  
                                   20                                  25                                  30  
 Arg Ser Phe Met Ala Leu Ser Gln Asp Ile Gln Lys Thr Ile Lys Lys

35	40	45	
Thr Ala Arg Arg Glu Gln Leu Met Arg Glu Glu Ala Glu Gln Lys Arg			
50	55	60	
Leu Lys Thr Val Leu Glu Leu Gln Tyr Val Leu Asp Lys Leu Gly Asp			
65	70	75	80
Asp Glu Val Arg Thr Asp Leu Lys Gln Gly Leu Asn Gly Val Pro Ile			
85	90	95	
Leu Ser Glu Glu Glu Leu Ser Leu Phe Asp Glu Phe Tyr Lys Leu Val			
100	105	110	
Asp Pro Glu Arg Asp Met Ser Leu Arg Leu Asn Glu Gln Tyr Glu His			
115	120	125	
Ala Ser Ile His Leu Trp Asp Leu Leu Glu Gly Lys Glu Lys Pro Val			
130	135	140	
Cys Gly Thr Thr Tyr Lys Val Leu Lys Glu Ile Val Glu Arg Val Phe			
145	150	155	160
Gln Ser Asn Tyr Phe Asp Ser Thr His Asn His Gln Asn Gly Leu Cys			
165	170	175	
Glu Glu Glu Glu Ala Ala Ser Ala Pro Ala Val Glu Asp Gln Val Pro			
180	185	190	
Glu Ala Glu Pro Glu Pro Ala Glu Glu Tyr Thr Glu Gln Ser Glu Val			
195	200	205	
Glu Ser Thr Glu Tyr Val Asn Arg Gln Phe Met Ala Glu Thr Gln Phe			
210	215	220	
Thr Ser Gly Glu Lys Glu Gln Val Asp Glu Trp Thr Val Glu Thr Val			
225	230	235	240
Glu Val Val Asn Ser Leu Gln Gln Gln Pro Gln Ala Ala Ser Pro Ser			
245	250	255	
Val Pro Glu Pro His Ser Leu Thr Pro Val Ala Gln Ala Asp Pro Leu			
260	265	270	

Val Arg Arg Gln Arg Val Gln Asp Leu Met Ala Gln Met Gln Gly Pro  
275 280 285

Tyr Asn Phe Ile Gln Asp Ser Met Leu Asp Phe Glu Asn Gln Thr Leu  
290 295 300

Asp Pro Ala Ile Val Ser Ala Gln Pro Met Asn Pro Thr Gln Asn Met  
305 310 315 320

Asp Met Pro Gln Leu Val Cys Pro Pro Val His Ser Glu Ser Arg Leu  
325 330 335

Ala Gln Pro Asn Gln Val Pro Val Gln Pro Glu Ala Thr Gln Val Pro  
340 345 350

Leu Val Ser Ser Thr Ser Glu Gly Tyr Thr Ala Ser Gln Pro Leu Tyr  
355 360 365

Gln Pro Ser His Ala Thr Glu Gln Arg Pro Gln Lys Glu Pro Ile Asp  
370 375 380

Gln Ile Gln Ala Thr Ile Ser Leu Asn Thr Asp Gln Thr Thr Ala Ser  
385 390 395 400

Ser Ser Leu Pro Ala Ala Ser Gln Pro Gln Val Phe Gln Ala Gly Thr  
405 410 415

Ser Lys Pro Leu His Ser Ser Gly Ile Asn Val Asn Ala Ala Pro Phe  
420 425 430

Gln Ser Met Gln Thr Val Phe Asn Met Asn Ala Pro Val Pro Pro Val  
435 440 445

Asn Glu Pro Glu Thr Leu Lys Gln Gln Asn Gln Tyr Gln Ala Ser Tyr  
450 455 460

Asn Gln Ser Phe Ser Ser Gln Pro His Gln Val Glu Gln Thr Glu Leu  
465 470 475 480

Gln Gln Glu Gln Leu Gln Thr Val Val Gly Thr Tyr His Gly Ser Pro  
485 490 495

Asp Gln Ser His Gln Val Thr Gly Asn His Gln Gln Pro Pro Gln Gln

500                                      505                                      510  
 Asn Thr Gly Phe Pro Arg Ser Asn Gln Pro Tyr Tyr Asn Ser Arg Gly  
 515                                      520                                      525  
 Val Ser Arg Gly Gly Ser Arg Gly Ala Arg Gly Leu Met Asn Gly His  
 530                                      535                                      540  
 Arg Gly Pro Ala Asn Gly Phe Arg Gly Gly Tyr Asp Gly Tyr Arg Pro  
 545                                      550                                      555                                      560  
 Ser Phe Ser Asn Thr Pro Asn Ser Gly Tyr Thr Gln Ser Gln Phe Ser  
 565                                      570                                      575  
 Ala Pro Arg Asp Tyr Ser Gly Tyr Gln Arg Asp Gly Tyr Gln Gln Asn  
 580                                      585                                      590  
 Phe Lys Arg Gly Ser Gly Gln Ser Gly Pro Arg Gly Ala Pro Arg Gly  
 595                                      600                                      605  
 Arg Gly Gly Pro Pro Arg Pro Asn Arg Gly Met Pro Gln Met Asn Thr  
 610                                      615                                      620  
 Gln Gln Val Asn  
 625

<210> 3218

<211> 566

<212> PRT

<213> Homo sapiens

<400> 3218

Met Gly Thr Ser Pro Cys Glu Ala Glu Leu Gln Glu Leu Met Glu Gln  
 1                                      5                                      10                                      15  
 Ile Asp Ile Met Val Ser Asn Lys Lys Met Asp Trp Glu Arg Lys Met  
 20                                      25                                      30

Arg Ala Leu Glu Thr Arg Leu Asp Leu Arg Asp Gln Glu Leu Ala Asn  
35 40 45  
Ala Gln Thr Cys Leu Asp Gln Lys Gly Gln Glu Val Gly Leu Leu Arg  
50 55 60  
Gln Lys Leu Asp Ser Leu Glu Lys Cys Asn Leu Ala Met Thr Gln Asn  
65 70 75 80  
Tyr Glu Gly Gln Leu Gln Ser Leu Lys Ala Gln Phe Ser Lys Leu Thr  
85 90 95  
Asn Asn Phe Glu Lys Leu Arg Leu His Gln Met Lys Gln Asn Lys Val  
100 105 110  
Pro Arg Lys Glu Leu Pro His Leu Lys Glu Glu Ile Pro Phe Glu Leu  
115 120 125  
Ser Asn Leu Asn Gln Lys Leu Glu Glu Phe Arg Ala Lys Ser Arg Glu  
130 135 140  
Trp Asp Lys Gln Glu Ile Leu Tyr Gln Thr His Leu Ile Ser Leu Asp  
145 150 155 160  
Ala Gln Gln Lys Leu Leu Ser Glu Lys Cys Asn Gln Phe Gln Lys Gln  
165 170 175  
Ala Gln Ser Tyr Gln Thr Gln Leu Asn Gly Lys Lys Gln Cys Leu Glu  
180 185 190  
Asp Ser Ser Ser Glu Ile Pro Arg Leu Ile Cys Asp Pro Asp Pro Asn  
195 200 205  
Cys Glu Ile Asn Glu Arg Asn Glu Phe Ile Ile Glu Lys Leu Lys Ser  
210 215 220  
Ala Val Asn Glu Ile Ala Leu Ser Arg Asn Lys Leu Gln Asp Glu Asn  
225 230 235 240  
Gln Lys Leu Leu Gln Glu Leu Lys Met Tyr Gln Arg Gln Cys Gln Ala  
245 250 255  
Met Glu Ala Gly Leu Ser Glu Val Lys Ser Glu Leu Gln Ser Arg Asp

260 265 270  
Asp Leu Leu Arg Ile Ile Glu Met Glu Arg Leu Gln Leu His Arg Glu  
275 280 285  
Leu Leu Lys Ile Gly Glu Cys Gln Asn Ala Gln Gly Asn Lys Thr Arg  
290 295 300  
Leu Glu Ser Ser Tyr Leu Pro Ser Ile Lys Glu Pro Glu Arg Lys Ile  
305 310 315 320  
Lys Glu Leu Phe Ser Val Met Gln Asp Gln Pro Asn His Glu Lys Glu  
325 330 335  
Leu Asn Lys Ile Arg Ser Gln Leu Gln Gln Val Glu Glu Tyr His Asn  
340 345 350  
Ser Glu Gln Glu Arg Met Arg Asn Glu Ile Ser Asp Leu Thr Glu Glu  
355 360 365  
Leu His Gln Lys Glu Ile Thr Ile Ala Thr Val Thr Lys Lys Ala Ala  
370 375 380  
Leu Leu Glu Lys Gln Leu Lys Met Glu Leu Glu Ile Lys Glu Lys Met  
385 390 395 400  
Leu Ala Lys Gln Lys Val Ser Asp Met Lys Tyr Lys Ala Val Arg Thr  
405 410 415  
Glu Asn Thr His Leu Lys Gly Met Met Gly Asp Leu Asp Pro Gly Arg  
420 425 430  
Tyr Met Ser Met Asp Phe Thr Asn Arg Glu Gln Ser Arg His Thr Ser  
435 440 445  
Ile Asn Lys Leu Gln Tyr Glu Asn Glu Arg Leu Arg Asn Asp Leu Ala  
450 455 460  
Lys Leu His Val Asn Gly Lys Ser Thr Trp Thr Asn Gln Asn Thr Tyr  
465 470 475 480  
Glu Glu Thr Gly Arg Tyr Ala Tyr Gln Ser Gln Ile Lys Val Glu Lys  
485 490 495

Asn Glu Glu Arg Leu Ser His Asp Cys Glu Pro Asn Arg Ser Thr Met  
                   500                                  505                                  510  
 Pro Pro Leu Pro Pro Ser Thr Phe Gln Ala Lys Glu Met Thr Ser Pro  
                   515                                  520                                  525  
 Leu Val Ser Asp Asp Asp Val Phe Pro Leu Val Ser Cys Trp Leu Trp  
                   530                                  535                                  540  
 Ala Phe Phe Phe Phe Asn Gly Leu Leu Leu Tyr Ser Tyr Thr Asp Val  
                   545                                  550                                  555                                  560  
 Asn Lys Leu Thr Tyr Ile  
   565

<210> 3219

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3219

Met Arg Cys Val Thr Arg Thr Arg Asn Trp Trp Arg Arg Ala Ala Arg  
           1                                  5                                  10                                  15  
 Met Pro Arg Ala Gly Ser Ser Ala Trp Trp Val Ala Val Cys Lys Gln  
                                   20                                  25                                  30  
 Val Cys Thr Arg Val Gly Thr Tyr Ala Val Cys Trp Cys Ser Trp Asn  
                                   35                                  40                                  45  
 Thr Gly Arg Phe Thr Gly Cys Pro Ser Trp Lys Asp Phe Trp Lys Pro  
                   50                                  55                                  60  
 Val Gly Pro Ala Leu His Val Phe Asp Val Lys Cys Glu Ala Gln Arg  
                   65                                  70                                  75                                  80  
 Gly Leu Lys Leu Thr Gln Pro Phe Thr Val Ala Cys Lys Ile Asp Pro



	85	90	95
Val Leu Cys Lys Ser Gly Leu Gly Phe Pro Pro Gln Leu Phe Thr Gly			
100	105	110	
Cys Val Tyr Leu Ser Thr Tyr Thr Tyr Pro Trp Gln Ala Gln Ala Glu			
115	120	125	
Cys Val Arg Cys Pro Arg Asp Ser Asn Arg Cys Lys Arg Ile Thr Pro			
130	135	140	
Ser Ala Cys Leu			
145			

&lt;210&gt; 3220

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3220

Met Gly Asn Ala Met Ser Lys Thr Gly Ser Arg Thr Leu Pro Gln Thr			
1	5	10	15
Glu Asn Arg Val Arg Lys Gln Ile Leu Gly Asn Tyr Pro Leu Leu Asn			
20	25	30	
Arg Pro Trp Val Tyr Ser Ala Lys Cys Phe Ala Gly Lys Glu Tyr Glu			
35	40	45	
Lys Arg Pro Glu Trp Asp Leu Val Glu Glu Val Ala Leu Gly Leu Gly			
50	55	60	
Ser Glu Gly Arg Gly Leu Gly Thr Glu Leu Cys Arg Leu Gly Glu Gly			
65	70	75	80
Ser Gly Gly Gly Cys Ala Val Trp Val Val Cys Gly Arg Leu Thr Ser			
85	90	95	

Met Ala Glu Thr

100

&lt;210&gt; 3221

&lt;211&gt; 470

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3221

Met Ser Leu Leu Gly Arg Asp Tyr Asn Ser Glu Leu Asn Ser Leu Asp

1 5 10 15

Asn Gly Pro Gln Ser Pro Ser Glu Ser Ser Ser Ser Ile Thr Ser Glu

20 25 30

Asn Val His Pro Ala Gly Glu Ala Gly Leu Ser Met Met Gln Thr Leu

35 40 45

Ile His Leu Leu Lys Cys Asn Ile Gly Thr Gly Leu Leu Gly Leu Pro

50 55 60

Leu Ala Ile Lys Asn Ala Gly Leu Leu Val Gly Pro Val Ser Leu Leu

65 70 75 80

Ala Ile Gly Val Leu Thr Val His Cys Met Val Ile Leu Leu Asn Cys

85 90 95

Ala Gln His Leu Ser Gln Arg Leu Gln Lys Thr Phe Val Asn Tyr Gly

100 105 110

Glu Ala Thr Met Tyr Gly Leu Glu Thr Cys Pro Asn Thr Trp Leu Arg

115 120 125

Ala His Ala Val Trp Gly Arg Tyr Thr Val Ser Phe Leu Leu Val Ile

130 135 140

Thr Gln Leu Gly Phe Cys Ser Val Tyr Phe Met Phe Met Ala Asp Asn

145                      150                      155                      160  
Leu Gln Gln Met Val Glu Glu Ala His Val Thr Ser Asn Ile Cys Gln  
                         165                      170                      175  
Pro Arg Glu Ile Leu Thr Leu Thr Pro Ile Leu Asp Ile Arg Phe Tyr  
                         180                      185                      190  
Met Leu Ile Ile Leu Pro Phe Leu Ile Leu Leu Val Phe Ile Gln Asn  
                         195                      200                      205  
Leu Lys Val Leu Ser Val Phe Ser Thr Leu Ala Asn Ile Thr Thr Leu  
                         210                      215                      220  
Gly Ser Met Ala Leu Ile Phe Glu Tyr Ile Met Glu Gly Ile Pro Tyr  
225                      230                      235                      240  
Pro Ser Asn Leu Pro Leu Met Ala Asn Trp Lys Thr Phe Leu Leu Phe  
                         245                      250                      255  
Phe Gly Thr Ala Ile Phe Thr Phe Glu Gly Val Gly Met Val Leu Pro  
                         260                      265                      270  
Leu Lys Asn Gln Met Lys His Pro Gln Gln Phe Ser Phe Val Leu Tyr  
                         275                      280                      285  
Leu Gly Met Ser Ile Val Ile Ile Leu Tyr Ile Leu Leu Gly Thr Leu  
                         290                      295                      300  
Gly Tyr Met Lys Phe Gly Ser Asp Thr Gln Ala Ser Ile Thr Leu Asn  
305                      310                      315                      320  
Leu Pro Asn Cys Trp Leu Tyr Gln Ser Val Lys Leu Met Tyr Ser Ile  
                         325                      330                      335  
Gly Ile Phe Phe Thr Tyr Ala Leu Gln Phe His Val Pro Ala Glu Ile  
                         340                      345                      350  
Ile Ile Pro Phe Ala Ile Ser Gln Val Ser Glu Ser Trp Ala Leu Phe  
                         355                      360                      365  
Val Asp Leu Ser Val Arg Ser Ala Leu Val Cys Leu Thr Cys Val Ser  
                         370                      375                      380

Ala Ile Leu Ile Pro Arg Leu Asp Leu Val Ile Ser Leu Val Gly Ser  
 385                      390                      395                      400  
 Val Ser Ser Ser Ala Leu Ala Leu Ile Ile Pro Ala Leu Leu Glu Ile  
                          405                      410                      415  
 Val Ile Phe Tyr Ser Glu Asp Met Ser Cys Val Thr Ile Ala Lys Asp  
                          420                      425                      430  
 Ile Met Ile Ser Ile Val Gly Leu Leu Gly Cys Ile Phe Gly Thr Tyr  
                          435                      440                      445  
 Gln Ala Leu Tyr Glu Leu Pro Gln Pro Ile Ser His Ser Met Ala Asn  
                          450                      455                      460  
 Ser Thr Gly Val His Ala  
 465                      470

<210> 3222

<211> 567

<212> PRT

<213> Homo sapiens

<400> 3222

Met Asp Ser Gly Gly Ser Thr Leu Ser Ser Ala Ala Ser Gly Leu Ala  
   1                      5                      10                      15  
 Pro Tyr Pro Pro Ala Ala Cys Leu Ser Thr Pro Tyr Ser Ser Ile Pro  
                          20                      25                      30  
 Arg Gly Arg Glu Lys Ala Gly Pro Met Gly Ser His Gln Gly Pro Gly  
                          35                      40                      45  
 Pro Pro Pro Cys Gln Lys Ala Pro Ser Gly Pro Val Thr Ser Cys Lys  
                          50                      55                      60  
 Ala Pro Phe Leu Val Asp Gln Ser Gln Lys Leu Pro Ala Val Pro Ala

65	70	75	80
Ser Ser Trp Lys Pro Pro Pro Gly Leu Ala Pro Pro Gln Lys Ala Pro			
	85	90	95
Ala Ala Ser Ala Pro Pro Arg Lys Ala Pro Ala Val Pro Ala Pro Ser			
	100	105	110
Gln Lys Ala Pro Ala Val Pro Ala Pro Ser Gln Lys Ala Pro Ala Ile			
	115	120	125
Pro Ala Pro Ser Arg Lys Ala Ser Ala Ala Ser Ala Ser Pro Arg Lys			
	130	135	140
Ala Ser Ala Val Pro Ala Pro Pro Gln Lys Thr Pro Pro Pro Ser Gln			
145	150	155	160
Lys Ala Pro Ser Val Pro Thr Ile Pro Gln Lys Ala Val Ser Pro Thr			
	165	170	175
Ala Pro Lys Lys Lys Ser Leu Leu Leu Pro Ala Pro Ser Gln Lys Ala			
	180	185	190
Leu Pro Thr Ser Pro Thr Gln Tyr Gln Met Ala Leu Ser Pro Pro Ala			
	195	200	205
Ser Arg Gly Lys Leu Pro Gly Asp Phe Asp Val Leu Pro Thr Gly Ile			
	210	215	220
Pro Gly Arg Ala Val Leu Glu Arg Ser Gln Ser Gly Gly Lys Pro Glu			
225	230	235	240
Pro Val Val Thr Val Arg Thr Gln Glu Thr Asp Val Val Glu Met Thr			
	245	250	255
Thr Gln Ala Lys Ser Pro Glu Ser Pro Phe Thr Val Thr Lys Lys Glu			
	260	265	270
Ser Lys Asp Ile Leu Ile Ser Gln Thr Glu Glu Val Thr Leu Glu Ala			
	275	280	285
Phe Arg Gly Gln Gly Lys Leu Glu Asp Trp Ala His Trp Ala Lys Leu			
	290	295	300

Glu Glu Arg Ser Pro Asp Leu Pro Gly Val Arg Ser Lys Glu Leu Glu  
305 310 315 320  
Gln Arg Lys Arg Trp Val Lys Ala Lys Glu Leu Ala Val Glu Gly Pro  
325 330 335  
Ser Gln Glu His Ser Arg Pro Phe Ser Val Glu Ala Leu Thr Leu Thr  
340 345 350  
Lys Leu Met Ile Thr Ala Asn Ser Lys Glu Gln Arg Ser Lys Ser Ala  
355 360 365  
Leu Val Ser Leu Pro Ser Trp Leu Leu Ala Thr Pro Gln Ala Ser Ala  
370 375 380  
Thr Ser Met Met Ala Ser Val Pro Ser Arg Pro Gly Gln Leu Ser Leu  
385 390 395 400  
Leu Glu Gly Lys Pro Val Val Val Arg Glu Gln Pro Glu Ser His Thr  
405 410 415  
Trp Val Lys Glu Gly Lys Arg Pro Trp Gly Glu Met Lys Glu Pro Pro  
420 425 430  
Trp Asp Pro Lys Gly Pro Pro Lys Val Pro Phe Arg Ser Lys Pro Thr  
435 440 445  
Ser Ala Ser Leu Lys Arg Glu Gly Ile Ser Gln Ala Pro Ile Pro Leu  
450 455 460  
Thr Ala Ser Pro Trp Glu Asp Leu Arg Pro Ser Pro Leu Ser Glu Thr  
465 470 475 480  
Leu Ile Ser Lys Met Glu Ala Thr Ala Arg Ala Ser Gln Gln Pro Lys  
485 490 495  
Arg Val Ser Gln Glu Pro Met Arg Met Pro Ala Gln His Pro Leu Ala  
500 505 510  
Thr Val Gly Ser Ser Ser Glu Ile Leu Leu Pro Met Leu Leu Gly Leu  
515 520 525  
Glu Thr Val Arg Asn Thr Ala Thr Lys Ala Glu Glu Ile Gln Glu Glu

530                      535                      540  
 Ser Gly Val Leu Asn Leu Leu Pro Ser Leu Gln His Ser Gln His Ser  
 545                      550                      555                      560  
 Glu Trp Pro Asp Ala Gly Ala  
 565

<210> 3223

<211> 900

<212> PRT

<213> Homo sapiens

<400> 3223

Met Ser Ser Lys Glu Ser Cys Gly Lys Lys Glu Thr Ser Gln Arg Lys  
 1                      5                      10                      15  
 Asp Thr Thr Thr Ser Ser Pro Asn Phe Gly Glu Lys Asp Lys Lys Glu  
 20                      25                      30  
 Arg Lys Thr Pro Ala Ser Ser Thr Ser Ser Ser Ser Ile Arg Ser Val  
 35                      40                      45  
 Ser Ser Glu Lys Arg Lys Leu Lys Ser Asp His Thr Asp Val Leu Tyr  
 50                      55                      60  
 Tyr Asn Ile Lys Arg Arg Gln Gly Leu Lys Arg Leu Ser Val Glu Ile  
 65                      70                      75                      80  
 Asp Thr Leu Arg Arg Arg Pro Lys Ile Gly Ser Ser Ser Gln Arg Pro  
 85                      90                      95  
 Ile Lys Leu Lys Glu Ala Ser Tyr Ser Asn Asp Asn Gln Ile Ile Leu  
 100                      105                      110  
 Gln Ser Pro Ser Ser Asn Gly Thr Lys Lys Asp Ile His Lys Cys Val  
 115                      120                      125

Asp Phe Lys Pro Lys Asp Ile Lys Leu Thr Asn Ala Gly Ser Lys Leu  
130 135 140  
Asp His Gly Val Lys Ser Leu Ser Ser Pro Lys Ile Ala Ser Asp Val  
145 150 155 160  
Lys Pro Lys Ala Glu Gly Gln Ala Ser Glu Asn Lys Trp Ser His Leu  
165 170 175  
Leu Val Gln Arg Glu Lys Met Lys Glu Leu Lys Lys Gly Arg Asn Ser  
180 185 190  
Lys Phe Arg Asp Asn Ser Glu Lys Cys Val Leu Glu Lys Trp Lys Arg  
195 200 205  
Asn Gln Phe Ser Gln Asp Tyr Asn Ser Asn Lys Ile Ile Lys Glu Pro  
210 215 220  
Leu Gly Ser Arg Arg Gln Lys Ile Ser Phe Lys Ile Pro Ile Lys Ser  
225 230 235 240  
Arg Asp Thr Leu Gln Lys Leu Val Glu Glu Asn Val Phe Asn Ile Asp  
245 250 255  
Ser Asn Asn Ser Lys Thr Lys Gln Glu Glu Arg Glu Tyr Leu Glu Ser  
260 265 270  
Ser Gln Ala Ser Leu Asn Val Thr Arg Gln Lys Thr Glu His Leu Leu  
275 280 285  
Ser Asp Phe Thr Tyr Lys Arg Thr Val His Glu Trp Lys Arg Lys His  
290 295 300  
His Tyr Asp His Gln Glu Ser Asn Asp Ser His Ser Arg Glu Asn Leu  
305 310 315 320  
Thr Gln Ser Phe Glu Ala Pro Cys Cys Ser Val Ser Ser Glu Ser Ile  
325 330 335  
Gln Asp Ala Asp Gln Glu Met Gln Ile Val Glu Glu Leu His Ala Ala  
340 345 350  
Arg Val Gly Lys Ser Val Asp Leu Pro Gly Glu Leu Met Ser Met Glu



355	360	365
Ile Asp Leu Glu Asp Asp Val His Ser Ser Ser Ala Asn Asn Thr Ser		
370	375	380
Asp Arg Lys Leu Leu Ile Val Ile Asp Thr Asn Ile Leu Met Asn His		
385	390	395
Leu Lys Phe Val Arg Ile Leu Lys Thr Thr Glu Val Pro Gly Phe Asp		
405	410	415
Lys Leu Val Leu Ile Thr Pro Trp Val Val Met Gln Glu Leu Asp Arg		
420	425	430
Met Lys Glu Gly Lys Leu Leu Lys Arg Ala Gln His Lys Ala Ile Pro		
435	440	445
Ala Val His Phe Ile Asn Asp Ser Leu Lys Asn Gln Asp Arg Lys Leu		
450	455	460
Trp Gly Gln Ser Ile Gln Leu Ala Ser Gln Lys His Tyr Gly Leu Ser		
465	470	475
Asp Glu Asn Asn Asp Asp Arg Val Leu Lys Cys Cys Leu Gln His Gln		
485	490	495
Glu Leu Phe Pro Cys Ser Phe Val Ile Leu Cys Thr Asp Asp Arg Asn		
500	505	510
Leu Arg Asn Lys Gly Leu Ile Ser Gly Val Lys Ser Leu Ser Lys Glu		
515	520	525
Glu Leu Ser Ala Glu Leu Leu Arg Leu Ser Leu Asn Thr Asp Val Cys		
530	535	540
His Gln Pro Cys Ile Pro Lys Gln Gln Leu Lys Ala Glu Thr Thr Pro		
545	550	555
Leu Lys Glu Ser Tyr Lys Glu Glu Ser Thr Asn Ser Gly Leu Ser Ile		
565	570	575
Leu Leu Glu Ser Val Val Ser Asp Leu Glu Lys Ser Leu Gly Thr Gly		
580	585	590

Leu Ser Ser Ile Leu Glu Thr Glu Met Lys Ile Ala Phe Gly Asn Leu  
595 600 605

Trp Met Glu Ile Leu Tyr Leu Lys Pro Pro Trp Thr Leu Leu His Leu  
610 615 620

Leu Gln Cys Phe Lys Lys His Trp Leu Ala Val Phe Gly Leu Val Met  
625 630 635 640

Glu Lys Asn Leu Leu Leu Thr Ile Glu Ser Leu Tyr Lys Asn Leu Arg  
645 650 655

Lys Ala Asn Lys Ala Val Asp Phe Thr Thr Val Lys Phe Leu Leu Gln  
660 665 670

Asp Ser Arg Ser Leu Leu His Ala Phe Ser Thr Arg Ser Asn Tyr Asp  
675 680 685

Gly Ile Leu Pro Gln Thr Phe Ala Gln Val Asn Asn Leu Leu Gln Thr  
690 695 700

Phe Ala Glu Val Lys Thr Lys Leu Lys Pro Asn Ser Ser Glu Asn Thr  
705 710 715 720

Val Thr Lys Lys Gln Glu Gly Thr Ser Leu Lys Asn Ser His Asn Gln  
725 730 735

Glu Ile Thr Gly Phe Ser Ser Ser His Leu Pro Gln Pro Ser Arg His  
740 745 750

Gln Glu Ile Trp Ser Ile Leu Glu Ser Val Trp Ile Thr Ile Tyr Gln  
755 760 765

Asn Ser Thr Asp Val Phe Gln Arg Leu Gly Ser Asn Ser Ala Leu Thr  
770 775 780

Thr Ser Asn Ile Ala Ser Phe Glu Glu Ala Phe Ile Cys Leu Gln Lys  
785 790 795 800

Leu Met Ala Ala Val Arg Asp Ile Leu Glu Gly Ile Gln Arg Ile Leu  
805 810 815

Ala Pro Asn Ser Asp Tyr Gln Asp Val Glu Thr Leu Tyr Asn Phe Leu

820 825 830  
 Ile Lys Tyr Glu Val Asn Lys Asn Val Lys Phe Thr Ala Gln Glu Ile  
 835 840 845  
 Tyr Asp Cys Val Ser Gln Thr Glu Tyr Arg Glu Lys Leu Thr Ile Gly  
 850 855 860  
 Cys Arg Gln Leu Val Glu Met Glu Tyr Thr Met Gln Gln Cys Asn Ala  
 865 870 875 880  
 Ser Val Tyr Met Glu Ala Lys Asn Arg Gly Trp Cys Glu Asp Met Leu  
 885 890 895  
 Asn Tyr Arg Ile  
 900

<210> 3224

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3224

Met Val Gln Ser Ser Arg Ser Ser Ala Thr Glu Lys Arg Val Thr Pro  
 1 5 10 15  
 Ile His His Gly Gln Ser Thr Gln Ser Gly Ser Ala Leu Asp Pro Ala  
 20 25 30  
 Arg Gln Met Gln Pro Leu Asn Arg Val Cys Ala Ser Lys Leu Asp Asp  
 35 40 45  
 Asp Arg Arg Asn Pro Val Ala Ser Glu Lys Thr Pro Asn Pro Arg Met  
 50 55 60  
 Lys Ala Ser Gly Ser Ile Pro Arg Asn Ser Cys Arg Gly Cys Cys Gly  
 65 70 75 80

Ile Phe Phe Lys Arg Thr Lys Gln Gly Lys Thr Lys Phe Asn Arg Val  
                     85                    90                    95  
 Glu Gln Pro Gly Val Val Gly His Ala Cys Asn Leu Ser Asn Leu Gly  
                     100                    105                    110  
 Gly Gln Gly Arg Ile Ser Ala Ile Trp Glu Ala Lys Ala Gly Arg Ser  
                     115                    120                    125  
 Leu Glu Pro Arg Ser Ser Arg Pro Ala Trp Ala Thr  
                     130                    135                    140

<210> 3225

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3225

Met Ala Phe Ala Arg Arg Leu Leu Arg Gly Pro Leu Ser Gly Pro Leu  
           1                    5                    10                    15  
 Leu Gly Arg Arg Gly Val Cys Ala Gly Ala Met Ala Pro Pro Arg Arg  
                     20                    25                    30  
 Phe Val Leu Glu Leu Pro Asp Cys Thr Leu Ala His Phe Ala Leu Gly  
                     35                    40                    45  
 Ala Asp Ala Pro Gly Asp Ala Asp Ala Pro Asp Pro Arg Leu Ala Ala  
                     50                    55                    60  
 Leu Leu Gly Pro Pro Glu Arg Ser Tyr Ser Leu Cys Val Pro Val Thr  
           65                    70                    75                    80  
 Pro Asp Ala Gly Cys Gly Ala Arg Val Arg Ala Ala Arg Leu His Gln  
                     85                    90                    95  
 Arg Leu Leu His Gln Leu Arg Arg Gly Pro Phe Gln Arg Cys Gln Leu

100	105	110	
Leu Arg Leu Leu Cys Tyr Cys Pro Gly Gly Gln Ala Gly Gly Ala Gln			
115	120	125	
Gln Gly Phe Leu Leu Arg Asp Pro Leu Asp Asp Pro Asp Thr Arg Gln			
130	135	140	
Ala Leu Leu Glu Leu Leu Gly Ala Cys Gln Glu Ala Pro Arg Pro His			
145	150	155	160
Leu Gly Glu Phe Glu Ala Asp Pro Arg Gly Gln Leu Trp Gln Arg Leu			
165	170	175	
Trp Glu Val Gln Asp Gly Arg Arg Leu Gln Val Gly Cys Ala Gln Val			
180	185	190	
Val Pro Val Pro Glu Pro Pro Leu His Pro Val Val Pro Asp Leu Pro			
195	200	205	
Ser Ser Val Val Phe Pro Asp Arg Glu Ala Ala Arg Ala Val Leu Glu			
210	215	220	
Glu Cys Thr Ser Phe Ile Pro Glu Ala Arg Ala Val Leu Asp Leu Val			
225	230	235	240
Asp Gln Cys Pro Lys Gln Ile Gln Lys Gly Lys Phe Gln Val Val Ala			
245	250	255	
Ile Glu Gly Leu Asp Ala Thr Gly Lys Thr Thr Val Thr Gln Ser Val			
260	265	270	
Ala Asp Ser Leu Lys Ala Val Pro Gln Pro Ile Thr Leu Cys Thr Ser			
275	280	285	
Gly Gln Arg Thr Cys Ser Asn Leu Thr Leu Ser Cys Cys Ser Leu			
290	295	300	

&lt;210&gt; 3226

&lt;211&gt; 316

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3226

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Met Val Asn Gln Ser Ser Pro Met Gly Phe Leu Leu Leu Gly Phe Ser
  1              5              10              15
Glu His Pro Ala Leu Glu Arg Thr Leu Phe Val Val Val Phe Thr Ser
          20              25              30
Tyr Leu Leu Thr Leu Val Gly Asn Thr Leu Ile Ile Leu Leu Ser Val
          35              40              45
Leu Tyr Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asp Leu
          50              55              60
Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Cys Val Pro Gln Met Leu
          65              70              75              80
Val Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Phe Leu Gly Cys Ser
          85              90              95
Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu
          100             105             110
Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu
          115             120             125
His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Trp Gln Leu Ala Ser
          130             135             140
Val Ala Trp Val Met Ser Leu Val Gln Ser Ile Val Gln Thr Pro Ser
          145             150             155             160
Thr Leu His Leu Pro Phe Cys Pro His Gln Gln Ile Asp Asp Phe Leu
          165             170             175
Cys Glu Val Pro Ser Leu Ile Arg Leu Ser Cys Gly Asp Thr Ser Tyr
          180             185             190
Asn Glu Ile Gln Leu Ala Val Ser Ser Val Ile Phe Val Val Val Pro

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195                                      200                                      205  
 Leu Ser Leu Ile Leu Ala Ser Tyr Gly Ala Thr Ala Gln Ala Val Leu  
       210                                      215                                      220  
 Arg Ile Asn Ser Ala Thr Ala Trp Arg Lys Ala Phe Gly Thr Cys Ser  
 225                                      230                                      235                                      240  
 Ser His Leu Thr Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val  
                                     245                                      250                                      255  
 Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Gly Arg Gly Lys Phe Phe  
                                     260                                      265                                      270  
 Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro Leu Val Tyr  
                                     275                                      280                                      285  
 Thr Leu Arg Asn Lys Glu Ile Lys Arg Ala Leu Arg Arg Leu Leu Gly  
                                     290                                      295                                      300  
 Lys Glu Arg Asp Ser Arg Glu Ser Trp Arg Ala Ala  
 305                                      310                                      315

<210> 3227

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3227

Met Leu Cys Pro Pro Arg His Ser Gln Ile Leu Glu Gly Ala Val Tyr  
       1                                      5                                      10                                      15  
 Thr Tyr Ser Phe Ile Val Pro Ser Thr Tyr Ser Met Thr Phe Lys Leu  
                                     20                                      25                                      30  
 Val Thr Met Asn His Asp Glu Ser Phe Ser Ser Thr Ser Cys Pro Ile  
                                     35                                      40                                      45

Thr Gly Gly Thr Thr Asp Phe Gly His Ile Ala Pro Thr Thr Ser Thr  
 50 55 60  
 Pro Val Pro Thr Ser Leu Glu Pro Val Ile Pro Ser Ser Arg Lys Pro  
 65 70 75 80  
 Ser Leu Asp Asn Leu Ile Lys Ser Leu Leu Met Tyr Tyr Pro Glu Ile  
 85 90 95  
 His Leu His Tyr Thr Ser His Asp  
 100

<210> 3228

<211> 630

<212> PRT

<213> Homo sapiens

<400> 3228

Met Ala Thr Asn Tyr Ser Ala Asn Gln Tyr Glu Lys Ala Phe Ser Ser  
 1 5 10 15  
 Lys Tyr Leu Gln Asn Trp Ser Pro Thr Lys Pro Thr Lys Glu Ser Ile  
 20 25 30  
 Ser Ser His Glu Gly Tyr Thr Gln Ile Ile Ala Asn Asp Arg Gly His  
 35 40 45  
 Leu Leu Pro Ser Val Pro Arg Ser Lys Ala Asn Pro Trp Gly Ser Phe  
 50 55 60  
 Met Gly Thr Trp Gln Met Pro Leu Lys Ile Pro Pro Ala Arg Val Thr  
 65 70 75 80  
 Leu Thr Ser Arg Thr Thr Ala Gly Ala Ala Ser Leu Thr Lys Trp Ile  
 85 90 95  
 Gln Lys Asn Pro Asp Leu Leu Lys Ala Ser Asn Gly Leu Cys Pro Glu



100 105 110  
Ile Leu Gly Lys Pro His Asp Pro Asp Ser Gln Lys Lys Leu Arg Lys  
115 120 125  
Lys Ser Ile Thr Lys Thr Val Gln Gln Ala Arg Ser Pro Thr Ile Ile  
130 135 140  
Pro Ser Ser Pro Ser Ala His Pro Leu Lys Pro Met Trp His Ala Ile  
145 150 155 160  
Ser Arg Thr Ser Arg Met Ser Gln Ser Gly Cys Pro Ser Gly Leu Leu  
165 170 175  
Ala Asp Lys Asn Ile Ser Ser Ser Ala Thr Arg Val Ile Val Lys Thr  
180 185 190  
Ala Gly Asn Gln Lys Asp Phe Met Val Ala Asp Asp Ile Ser Val Arg  
195 200 205  
Gln Phe Lys Glu Met Leu Leu Ala His Phe Gln Cys Gln Met Asp Gln  
210 215 220  
Leu Val Leu Val Phe Met Gly Cys Leu Leu Lys Asp His Asp Thr Leu  
225 230 235 240  
Ser Gln Arg Gly Ile Met Asp Gly His Thr Ile Tyr Leu Val Ile Lys  
245 250 255  
Ser Lys Gln Gly Ser Arg Ser Leu Ala His Ser Phe Arg Asp Leu Pro  
260 265 270  
Thr Asn Asp Pro Cys His Arg Asp Arg Asn Thr Lys Gly Asn Ser Ser  
275 280 285  
Arg Val His Gln Pro Thr Gly Met Asn Gln Ala Pro Val Glu Leu Ala  
290 295 300  
His Phe Val Gly Ser Asp Ala Pro Lys Val His Thr Gln Asn Leu Glu  
305 310 315 320  
Val Ser His Pro Glu Cys Lys Ala Gln Met Leu Glu Asn Pro Ser Ile  
325 330 335

Gln Arg Leu Leu Ser Asn Met Glu Phe Met Trp Gln Phe Ile Ser Glu  
340 345 350  
His Leu Asp Thr Gln Gln Leu Met Gln Gln Asn Pro Glu Val Ser Arg  
355 360 365  
Leu Leu Leu Asp Asn Ser Glu Ile Leu Leu Gln Thr Leu Glu Leu Ala  
370 375 380  
Arg Asn Leu Ala Met Ile Gln Glu Ile Met Gln Ile Gln Gln Pro Ser  
385 390 395 400  
Gln Asn Leu Glu Tyr Pro Leu Asn Pro Gln Pro Tyr Leu Gly Leu Glu  
405 410 415  
Thr Met Pro Gly Gly Asn Asn Ala Leu Gly Gln Asn Tyr Val Asp Ile  
420 425 430  
Asn Asp Gln Met Leu Asn Ser Met Gln Asp Pro Phe Gly Gly Asn Pro  
435 440 445  
Phe Thr Ala Leu Leu Ala Gly Gln Val Leu Glu Gln Val Gln Ser Ser  
450 455 460  
Pro Pro Pro Pro Pro Pro Ser Gln Glu Gln Gln Asp Gln Leu Thr Gln  
465 470 475 480  
His Pro Ala Thr Arg Val Ile Tyr Asn Ser Ser Gly Gly Phe Ser Ser  
485 490 495  
Asn Thr Ser Ala Asn Asp Thr Leu Asn Lys Val Asn His Thr Ser Lys  
500 505 510  
Ala Asn Thr Ala Met Ile Ser Thr Lys Gly Gln Ser His Ile Cys Ala  
515 520 525  
Thr Arg Gln Pro Ala Gly Ile Pro Ala Leu Pro Ser Ile Glu Leu Thr  
530 535 540  
Gln Gln Leu Gln Glu Glu Tyr Lys Asp Ala Thr Val Ser Leu Ser Ser  
545 550 555 560  
Ser Arg Gln Thr Leu Lys Gly Asp Leu Gln Leu Ser Asp Glu Gln Ser

565 570 575  
Ser Ser Gln Ile Thr Gly Gly Met Met Gln Leu Leu Met Asn Asn Pro  
580 585 590  
Tyr Leu Ala Ala Gln Ile Met Leu Phe Thr Ser Met Pro Gln Leu Ser  
595 600 605  
Glu Gln Trp Arg Gln Gln Leu Pro Thr Phe Leu Gln Gln Thr Gln Ile  
610 615 620  
Ser Asp Leu Leu Ser Ala  
625 630

&lt;210&gt; 3229

&lt;211&gt; 498

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3229

Met Ala Ile Cys Ile Leu Thr Trp Arg Ile Arg Pro Phe Cys Ile Glu  
1 5 10 15  
Pro Thr Asn Ile Val Asn Val Asn His Val Ile Gln Arg Val Ser Asp  
20 25 30  
His Ala Ser Ala Met Asn Lys Arg Ile His Tyr Tyr Ser Arg Leu Thr  
35 40 45  
Thr Pro Ala Asp Lys Ala Leu Ile Ala Pro Asp His Val Val Pro Ala  
50 55 60  
Pro Glu Glu Cys Tyr Val Tyr Ser Pro Leu Gly Ser Ala Tyr Lys Leu  
65 70 75 80  
Gln Ser Tyr Thr Glu Gly Tyr Gly Lys Asn Thr Ser Leu Val Thr Ile  
85 90 95

Phe Met Ile Trp Asn Thr Met Met Gly Thr Ser Ile Leu Ser Ile Pro  
100 105 110  
Trp Gly Ile Lys Gln Ala Gly Phe Thr Thr Gly Met Cys Val Ile Ile  
115 120 125  
Leu Met Gly Leu Leu Thr Leu Tyr Cys Cys Tyr Arg Val Val Lys Ser  
130 135 140  
Arg Thr Met Met Phe Ser Leu Asp Thr Thr Ser Trp Glu Tyr Pro Asp  
145 150 155 160  
Val Cys Arg His Tyr Phe Gly Ser Phe Gly Gln Trp Ser Ser Leu Leu  
165 170 175  
Phe Ser Leu Val Ser Leu Ile Gly Ala Met Ile Val Tyr Trp Val Leu  
180 185 190  
Met Ser Asn Phe Leu Phe Asn Thr Gly Lys Phe Ile Phe Asn Phe Ile  
195 200 205  
His His Ile Asn Asp Thr Asp Thr Ile Leu Ser Thr Asn Asn Ser Asn  
210 215 220  
Pro Val Ile Cys Pro Ser Ala Gly Ser Gly Gly His Pro Asp Asn Ser  
225 230 235 240  
Ser Met Ile Phe Tyr Ala Asn Asp Thr Gly Ala Gln Gln Phe Glu Lys  
245 250 255  
Trp Trp Asp Lys Ser Arg Thr Val Pro Phe Tyr Leu Val Gly Leu Leu  
260 265 270  
Leu Pro Leu Leu Asn Phe Lys Ser Pro Ser Phe Phe Ser Lys Phe Asn  
275 280 285  
Ile Leu Glu Ile Arg Phe Gln Phe Pro Gln Leu Thr Gly Val Leu Thr  
290 295 300  
Leu Ala Phe Phe Ile His Asn Cys Ile Ile Thr Leu Leu Lys Asn Asn  
305 310 315 320  
Lys Lys Gln Glu Asn Asn Val Arg Asp Leu Cys Ile Ala Tyr Met Leu

325 330 335  
 Val Thr Leu Thr Tyr Leu Tyr Ile Gly Val Leu Val Phe Ala Ser Phe  
 340 345 350  
 Pro Ser Pro Pro Leu Ser Lys Asp Cys Ile Glu Gln Asn Phe Leu Asp  
 355 360 365  
 Asn Phe Pro Ser Ser Asp Thr Leu Ser Phe Ile Ala Arg Ile Phe Leu  
 370 375 380  
 Leu Phe Gln Met Met Thr Val Tyr Pro Leu Leu Gly Tyr Leu Ala Arg  
 385 390 395 400  
 Val Gln Leu Leu Gly His Ile Phe Gly Asp Ile Tyr Pro Ser Ile Phe  
 405 410 415  
 His Val Leu Ile Leu Asn Leu Ile Ile Val Gly Ala Gly Val Ile Met  
 420 425 430  
 Ala Cys Phe Tyr Pro Asn Ile Gly Gly Ile Ile Arg Tyr Ser Gly Ala  
 435 440 445  
 Ala Cys Gly Leu Ala Phe Val Phe Ile Tyr Pro Ser Leu Ile Tyr Ile  
 450 455 460  
 Ile Ser Leu His Gln Glu Glu Arg Leu Thr Trp Pro Lys Leu Ile Phe  
 465 470 475 480  
 His Val Phe Ile Ile Ile Leu Gly Val Ala Asn Leu Ile Val Gln Phe  
 485 490 495  
 Phe Met

&lt;210&gt; 3230

&lt;211&gt; 267

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3230

Met Val Gly Arg Ser Ser Leu Leu Val Gly Asn Leu Lys Lys Lys Tyr  
 1 5 10 15  
 Ala Gln Gly Phe Leu Pro Glu Lys Leu Pro Gln Gln Asp His Thr Thr  
 20 25 30  
 Thr Thr Asp Ser Glu Met Glu Glu Pro Tyr Leu Gln Glu Ser Lys Glu  
 35 40 45  
 Glu Gly Ala Pro Leu Lys Leu Lys Cys Glu Leu Cys Gly Arg Val Asp  
 50 55 60  
 Phe Ala Tyr Lys Phe Lys Arg Ser Lys Arg Phe Cys Ser Met Ala Cys  
 65 70 75 80  
 Ala Lys Arg Tyr Asn Val Gly Cys Thr Lys Arg Val Gly Leu Phe His  
 85 90 95  
 Ser Asp Arg Ser Lys Leu Gln Lys Ala Gly Ala Ala Thr His Asn Arg  
 100 105 110  
 Arg Arg Ala Ser Lys Ala Ser Leu Pro Pro Leu Thr Lys Asp Thr Lys  
 115 120 125  
 Lys Gln Pro Thr Gly Thr Val Pro Leu Ser Val Thr Ala Ala Leu Gln  
 130 135 140  
 Leu Thr His Ser Gln Glu Asp Ser Ser Arg Cys Ser Asp Asn Ser Asn  
 145 150 155 160  
 Tyr Glu Glu Pro Leu Ser Pro Ile Ser Ala Ser Ser Ser Thr Ser Arg  
 165 170 175  
 Arg Arg Gln Gly Gln Arg Asp Leu Glu Leu Pro Asp Met His Met Arg  
 180 185 190  
 Glu Leu Val Gly Met Gly His His Phe Leu Pro Ser Glu Pro Thr Lys  
 195 200 205  
 Trp Asn Val Glu Asp Val Tyr Glu Phe Ile Arg Ser Leu Pro Gly Leu

210                      215                      220  
 Pro Ser Ser Phe Pro Lys Gly His Glu Thr Ser Ile Tyr Ser Leu Ser  
 225                      230                      235                      240  
 Lys His Leu Arg His Ser Arg Phe Pro Gln Ser Pro Ser Gly Ser Cys  
                          245                      250                      255  
 Leu Trp Pro Val Leu Arg Pro Arg Pro His Leu  
                          260                      265

<210> 3231

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3231

Met Ala Thr Val Lys Cys Gly Val Gly Ser Met Arg Ser Lys Pro Phe  
 1                      5                      10                      15  
 Ala Arg Ala Val Pro Ala Cys Pro Pro Thr Cys Ser Pro Ala Leu Ala  
                          20                      25                      30  
 Gly Pro Pro Pro Pro Arg Phe Pro Glu Arg Ala Ala Ser Ser Glu Gly  
                          35                      40                      45  
 Ser Pro Thr His Ser Pro Pro His Pro Pro Gln Arg Leu Gln Pro Pro  
                          50                      55                      60  
 Val Arg Val Val Pro Lys Pro Thr Arg Ala Leu Ser Thr Leu Arg Gln  
 65                      70                      75                      80  
 Leu His Val Gln Pro Pro Thr Arg Ser Gln Pro His Trp Arg Arg Thr  
                          85                      90                      95  
 His His Arg Ser Pro Phe Thr Arg Phe Thr Gly Ser Ala Ala Pro Thr  
                          100                      105                      110

Pro Ser Ala Gln Leu His Ala Ala Ser Pro His Ser Pro Gln Arg Leu  
115 120 125  
Gln His Pro Gln Cys Ala Gln Leu Cys Gln Ser Leu Pro Arg Val Pro  
130 135 140  
Pro Leu His His Phe Gly Pro  
145 150

&lt;210&gt; 3232

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3232

Met Leu Gly Ile Ile Pro Ser Leu Leu Arg Arg Ala Leu Leu Gln Val  
1 5 10 15  
His Gly Ser Leu Cys Ser Ile Gly Arg Arg Pro Gly Asp Thr Gly Glu  
20 25 30  
Ala Arg Glu Arg Gly Gln Val Ala Pro Pro Asp Ser Leu Ala Cys Cys  
35 40 45  
Glu Glu Gly Arg Asn Gly Ser Leu Val Pro Lys Val Arg Pro Asp Arg  
50 55 60  
Cys Val Gly Glu His Gly Gln His Pro Gly Gly Ala Gly Arg Ala Leu  
65 70 75 80  
Glu Gln Ala Ser Gln Phe Arg Pro Trp Pro Ser Pro Trp Cys Leu Leu  
85 90 95  
Ala Trp Pro Gly Phe Leu Ile Gln Gln Val Trp Pro Gly Trp Asp Phe  
100 105 110  
Ala Phe Leu Glu Cys Ser Pro Phe Leu Leu Met Leu Leu Val Gln Gly



115	120	125
Pro His Phe Glu Asn His Trp Phe Ala Ser Ser Ser Pro Ser Pro		
130	135	140

&lt;210&gt; 3233

&lt;211&gt; 555

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3233

Met Trp Glu Gln Glu Glu Lys Met Trp Glu Gln Glu Glu Lys Met Trp		
1	5	10
Glu Gln Gln Arg Leu Pro Glu Gln Lys Glu Lys Leu Trp Glu His Glu		
20	25	30
Lys Met Gln Glu Gln Glu Lys Met Gln Glu Gln Glu Glu Lys Ile Trp		
35	40	45
Glu Gln Glu Lys Met Arg Asp Gln Glu Glu Lys Met Trp Gly Gln Glu		
50	55	60
Glu Lys Met Trp Gly Gln Glu Glu Lys Met Trp Gly Gln Glu Glu Lys		
65	70	75
Met Arg Glu Gln Glu Asp Val Glu Thr Gly Gly Glu Ala Ala Gly Ala		
85	90	95
Gly Glu Ala Asp Val Gly Ala Gly Gly Glu Asp Ala Glu Ala Gly Gly		
100	105	110
Glu Asp Ala Gly Ser Gly Ala Glu Asp Val Gly Pro Glu Gly Glu Asp		
115	120	125
Val Gly Ala Gly Arg Glu Ala Ala Gly Glu Gly Gly Glu Asn Ala Gly		
130	135	140

Ala Glu Asp Val Ala Ala Gly Gly Glu Asp Ala Gly Gly Glu Glu Asp  
145 150 155 160  
Ala Gly Ala Gly Glu Glu Asp Met Gly Pro Gly Glu Asp Ala Arg Gly  
165 170 175  
Gly Glu His Ala Gly Ala Gly Glu Glu Asp Ala Gly Gly Gly Gly Asp  
180 185 190  
Asp Ala Gly Ala Gly Gly Glu Asp Ala Gly Ala Gly Arg Lys Asp Ala  
195 200 205  
Gly Ala Gly Gly Gly Asp Val Gly Ala Gly Gly Glu Asp Val Gly Ala  
210 215 220  
Gly Arg Glu Asp Val Gly Ala Ala Glu Ala Thr Gly Thr Glu Gly Glu  
225 230 235 240  
Ala Val Gly Thr Arg Glu Asp Ala Gly Ala Gly Glu Asp Met Gly Ala  
245 250 255  
Gly Gly Glu Asp Ala Gly Pro Gly Gly Glu Asp Ala Gly Pro Gly Gly  
260 265 270  
Glu Asp Ala Gly Ala Gly Gly Glu Asp Ala Gly Ala Gly Gly Glu Asp  
275 280 285  
Val Gly Ala Gly Gly Glu Asp Val Gly Ala Gly Gly Glu Asp Val Gly  
290 295 300  
Pro Gly Gly Glu Asp Val Gly Ala Gly Gly Glu Asp Val Gly Pro Gly  
305 310 315 320  
Gly Glu Asp Ala Gly Gly Arg Arg Arg Arg Cys Gly Gly Arg Arg Arg  
325 330 335  
Arg Cys Gly Ala Arg Arg Arg Arg Cys Gly Gly Arg Arg Arg Arg Cys  
340 345 350  
Gly Gly Gln Glu Glu Lys Met Arg Gly Ala Gly Gly Glu Asp Ala Gly  
355 360 365  
Asp Arg Arg Arg Arg Cys Gly Gly Gln Glu Glu Lys Met Arg Glu Gln

370 375 380  
Glu Glu Lys Met Arg Glu Gln Glu Glu Lys Met Gln Gly Gln Glu Glu  
385 390 395 400  
Lys Met Arg Glu Gln Glu Glu Lys Met Arg Gly Gln Glu Glu Lys Met  
405 410 415  
Arg Glu Gln Glu Glu Lys Met Arg Gly Gln Glu Glu Lys Met Trp Gly  
420 425 430  
Gln Glu Glu Lys Met Trp Gly Gln Glu Glu Lys Met Trp Gly Gln Glu  
435 440 445  
Glu Met Met Arg Glu Lys Glu Glu Arg Ile Arg Asp Gln Lys Glu Lys  
450 455 460  
Met Gln Glu Arg Leu Pro Glu His Glu Glu Arg Cys Ser Glu Pro Cys  
465 470 475 480  
Leu Pro Pro Ser Lys Val Leu Cys Asn Met Ser His Thr Gly Ser Val  
485 490 495  
Glu Pro Ala Gly Gly Glu Ala Gly Glu Gly Ser Pro Gln Asp Asn Pro  
500 505 510  
Thr Ala Gln Glu Ile Met Gln Leu Phe Cys Gly Met Lys Asn Ala Gln  
515 520 525  
Gln Cys Pro Gly Leu Gly Ser Thr Ser Cys Ile Pro Phe Phe Tyr Arg  
530 535 540  
Gly Asp Lys Arg Lys Met Lys Ile Ile Asn Ile  
545 550 555

&lt;210&gt; 3234

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3234

Met Glu His Ala Val Glu Glu Val Lys Asn Ser Leu Gln Leu Phe Glu  
 1 5 10 15  
 Glu Tyr Phe Leu Gln Asp Lys Met Phe Ile Thr Gly Asn Gln Ile Ser  
 20 25 30  
 Leu Ala Asp Leu Val Ala Val Val Glu Met Met Gln Pro Met Ala Ala  
 35 40 45  
 Asn Tyr Asn Val Phe Leu Asn Ser Ser Lys Leu Ala Glu Trp Arg Met  
 50 55 60  
 Arg Val Glu Leu Asn Ile Gly Cys Gly Leu Phe Arg Glu Ala His Asp  
 65 70 75 80  
 Arg Leu Met Gln Leu Ala Asp Trp Asp Phe Ser Thr Leu Asp Pro Met  
 85 90 95  
 Val Thr Arg Lys Ile Cys Arg Ala Arg Trp Leu Thr Pro Val Ile Pro  
 100 105 110  
 Ala Leu

&lt;210&gt; 3235

&lt;211&gt; 774

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3235

Met Thr Leu Ile Ser Ala Glu Gly Glu Ser Lys Gln Lys Ala Pro Lys  
 1 5 10 15  
 Glu Asp Lys Arg Pro Pro Trp Ala Pro Pro Pro Gln His Asn Phe Leu

20	25	30
Lys Asn Trp Gln Arg Asn Thr Ala Leu Arg Lys Lys Gln Gln Glu Ala		
35	40	45
Leu Ser Glu His Leu Lys Lys Pro Val Ser Glu Leu Leu Met His Thr		
50	55	60
Gly Glu Thr Tyr Arg Arg Ile Gln Glu Glu Arg Glu Leu Ile Asp Cys		
65	70	75
Thr Leu Pro Thr Arg Arg Asn Arg Lys Ser Trp Glu Asn Ser Gly Phe		
85	90	95
Trp Ser Arg Leu Glu Tyr Leu Gly Asp Glu Met Thr Gly Leu Val Met		
100	105	110
Thr Lys Thr Lys Thr Gln Arg Gly Leu Met Glu Pro Ile Thr His Ile		
115	120	125
Arg Lys Pro His Ser Ile Arg Val Glu Thr Gly Leu Pro Ala Gln Arg		
130	135	140
Asp Ala Ser Tyr Arg Tyr Thr Trp Asp Arg Ser Leu Phe Leu Ile Tyr		
145	150	155
Arg Arg Lys Glu Leu Gln Arg Ile Met Glu Glu Leu Asp Phe Ser Gln		
165	170	175
Gln Asp Ile Asp Gly Leu Glu Val Val Gly Lys Gly Trp Pro Phe Ser		
180	185	190
Ala Val Thr Val Glu Asp Tyr Thr Glu Phe Glu Arg Ser Gln Gly Ser		
195	200	205
Ser Ser Glu Asp Thr Thr Tyr Leu Gly Thr Leu Ala Ser Ser Ser Asp		
210	215	220
Val Ser Met Pro Ile Leu Gly Pro Ser Leu Leu Phe Cys Gly Lys Pro		
225	230	235
Ala Cys Trp Ile Arg Gly Ser Asn Pro Gln Asp Lys Arg Gln Val Gly		
245	250	255

Ile Ala Ala His Leu Thr Phe Glu Thr Leu Glu Gly Glu Lys Thr Ser  
260 265 270  
Ser Glu Leu Thr Val Val Asn Asn Gly Thr Val Ala Ile Trp Tyr Asp  
275 280 285  
Trp Arg Arg Gln His Gln Pro Asp Thr Phe Gln Asp Leu Lys Lys Asn  
290 295 300  
Arg Met Gln Arg Phe Tyr Phe Asp Asn Arg Glu Gly Val Ile Leu Pro  
305 310 315 320  
Gly Glu Ile Lys Thr Phe Thr Phe Phe Phe Lys Ser Leu Thr Ala Gly  
325 330 335  
Val Phe Arg Glu Phe Trp Glu Phe Arg Thr His Pro Thr Leu Leu Gly  
340 345 350  
Gly Ala Ile Leu Gln Val Asn Leu His Ala Val Ser Leu Thr Gln Asp  
355 360 365  
Val Phe Glu Asp Glu Arg Lys Val Leu Glu Ser Lys Leu Thr Ala His  
370 375 380  
Glu Ala Val Thr Val Val Arg Glu Val Leu Gln Glu Leu Leu Met Gly  
385 390 395 400  
Val Leu Thr Pro Glu Arg Thr Pro Ser Pro Val Asp Ala Tyr Leu Thr  
405 410 415  
Glu Glu Asp Leu Phe Arg His Arg Asn Pro Pro Leu His Tyr Glu His  
420 425 430  
Gln Val Val Gln Ser Leu His Gln Leu Trp Arg Gln Tyr Met Thr Leu  
435 440 445  
Pro Ala Lys Ala Glu Glu Ala Arg Pro Gly Asp Lys Glu His Val Ser  
450 455 460  
Pro Ile Ala Thr Glu Lys Ala Ser Val Asn Ala Glu Leu Leu Pro Arg  
465 470 475 480  
Phe Arg Ser Pro Ile Ser Glu Thr Gln Val Pro Arg Pro Glu Asn Glu

485	490	495
Ala Leu Arg Glu Ser Gly Ser Gln Lys	Ala Arg Val Gly Thr Lys Ser	
500	505	510
Pro Gln Arg Lys Ser Ile Met Glu Glu Ile	Leu Val Glu Glu Ser Pro	
515	520	525
Asp Val Asp Ser Thr Lys Ser Pro Trp Glu	Pro Asp Gly Leu Pro Leu	
530	535	540
Leu Glu Trp Asn Leu Cys Leu Glu Asp Phe	Arg Lys Ala Val Met Val	
545	550	555
Leu Pro Asp Glu Asn His Arg Glu Asp Ala	Leu Met Arg Leu Asn Lys	
565	570	575
Ala Ala Leu Glu Leu Cys Gln Lys Pro Arg	Pro Leu Gln Ser Asn Leu	
580	585	590
Leu His Gln Met Cys Leu Gln Leu Trp Arg	Asp Val Ile Asp Ser Leu	
595	600	605
Val Gly His Ser Met Trp Leu Arg Ser Val	Leu Gly Leu Pro Glu Lys	
610	615	620
Glu Thr Ile Tyr Leu Asn Val Pro Glu Glu	Gln Asp Gln Lys Ser Pro	
625	630	635
Pro Ile Met Glu Val Lys Val Pro Val Gly	Lys Ala Gly Lys Glu Glu	
645	650	655
Arg Lys Gly Ala Ala Gln Glu Lys Lys Gln	Leu Gly Ile Lys Asp Lys	
660	665	670
Glu Asp Lys Lys Gly Ala Lys Leu Leu Gly	Lys Glu Asp Arg Pro Asn	
675	680	685
Ser Lys Lys His Lys Ala Lys Asp Asp Lys	Lys Val Ile Lys Ser Ala	
690	695	700
Ser Gln Asp Arg Phe Ser Leu Glu Asp Pro	Thr Pro Asp Ile Ile Leu	
705	710	715
		720

Ser Ser Gln Glu Pro Ile Asp Pro Leu Val Met Gly Lys Tyr Thr Gln  
                     725                    730                    735  
 Arg Leu His Ser Glu Val Arg Gly Leu Leu Asp Thr Leu Val Thr Asp  
                     740                    745                    750  
 Leu Met Val Leu Ala Asp Glu Leu Ser Pro Ile Lys Asn Val Glu Glu  
                     755                    760                    765  
 Ala Leu Arg Leu Cys Arg  
                     770

<210> 3236

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3236

Met Asn Lys Val Glu Leu Glu Ser Leu Leu Glu Gly Leu Thr Asp Glu  
     1                    5                    10                    15  
 Ile Asn Phe Leu Arg Gln Leu Tyr Glu Glu Glu Ile Trp Glu Leu Gln  
                     20                    25                    30  
 Ser Gln Ile Ser Asp Thr Ser Val Val Leu Ser Met Asp Ser Ser Arg  
                     35                    40                    45  
 Ser Leu Asp Met Asp Ser Ile Ile Pro Glu Val Lys Ala Gln Tyr Lys  
                     50                    55                    60  
 Glu Ile Ala Asn Gly Ser Trp Ala Glu Ala Glu Gly Met His Gln Ile  
     65                    70                    75                    80  
 Lys Tyr Glu Glu Leu Gln Thr Leu Pro Gly Lys His Arg Asn Asp Leu  
                     85                    90                    95  
 Arg Tyr Ala Lys Met Glu Ile Ser Glu Ile Asn Arg Asn Ile Ser Arg



100 105 110  
 Leu Gln Ala Gln Thr Glu Gly Leu Lys Gly Gln Arg Val Ser Leu Glu  
 115 120 125  
 Ala Ala Thr Ala Asp Ala Glu Gln Tyr Gly Glu Leu Ala Val Lys Asp  
 130 135 140  
 Ala Asn Thr Lys Leu Ser Ser Trp Arg Pro Pro Cys Ser Gly Pro Ser  
 145 150 155 160  
 Lys Thr Trp Cys Ser Ser Cys Ala Met Glu His Gln Glu Leu Met Asn  
 165 170 175  
 Val Lys Leu Ala Leu Asp Ile Lys Ile Ala Thr Tyr Arg Lys Leu Leu  
 180 185 190  
 Glu Gly Glu Glu Ser  
 195

&lt;210&gt; 3237

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3237

Met His Gln Ala Gln Phe Pro Met Thr Ser Gly Asn Leu Cys Ala Thr  
 1 5 10 15  
 Ala Lys Leu Arg His His Ser Ser Arg Trp Leu Arg Arg Ser Gly Ala  
 20 25 30  
 Phe Ser Ser Gly Ser Thr Leu Lys Pro Pro Pro Ser Pro Ser Pro Ala  
 35 40 45  
 Pro Leu Cys His Ala Asp Asn Leu Arg Thr Gly Arg Thr Arg Ser Pro  
 50 55 60

Gly Ala Ala Arg Ser Pro Leu Lys Ser Ser Leu Ser Asp Pro Arg Pro  
 65 70 75 80  
 Phe Pro Gly His Pro Phe Arg Arg Thr Cys Gly Ala Arg Ala Val Pro  
 85 90 95  
 Thr Gly Cys Phe Thr Gly Gln Glu Gly Thr Trp Asn Pro Pro Pro Gly  
 100 105 110  
 Pro Cys Pro Ser Ala Arg His Leu Ile Pro Ala Gly Pro Pro Gly Trp  
 115 120 125  
 Ser Ser Ser Arg Leu Trp Arg Val Pro Arg Pro Cys Ala Ala Ala Pro  
 130 135 140  
 Cys Ala Arg Arg Ser Ser Pro Pro Gly Thr Ser Thr Pro Ala Pro Thr  
 145 150 155 160  
 Cys Val Pro Leu Ala Pro Lys Leu Pro Pro Tyr Val Trp Val Ala Ser  
 165 170 175  
 Glu Met Trp Gly Arg Arg His Ser Arg Lys Lys Gly Ile Arg Gly Ala  
 180 185 190  
 Ser Thr Ser Ser Glu His Phe Ile Pro Gln Asp Ala Thr Arg Ser Leu  
 195 200 205  
 Ser Trp Arg Ser Arg Ser Val His Arg Val Leu Phe Pro Trp Lys Met  
 210 215 220  
 Cys Thr Leu Glu Thr Ala  
 225 230

&lt;210&gt; 3238

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3238

Met Arg Ile Phe Val Lys Thr Leu Thr Gly Lys Ile Ile Thr Leu Glu

1 5 10 15

Val Glu Pro Ser Ala Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp

20 25 30

Lys Glu Gly Asn Pro Cys Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys

35 40 45

Gln Arg Glu Asp Gly Arg Ser Leu Ser Asp Tyr Asn Ile Gln Lys Glu

50 55 60

Ser Thr Leu His Leu Val Leu Arg Arg Arg Gly Gly Met Gln Ile Phe

65 70 75 80

Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu Pro Ser

85 90 95

Asp Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile

100 105 110

Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys Gln Leu Glu Asp

115 120 125

Gly Arg Ser Leu Ser Asp Tyr Asn Ile Gln Lys Glu Ser Thr Leu His

130 135 140

Leu Val Leu Arg Leu Arg Gly Gly Met Gln Ile Phe Val Lys Thr Leu

145 150 155 160

Thr Gly Lys Thr Ile Thr Gln Leu Gln Trp Leu Ser Gln Ser Glu Ser

165 170 175

Gly Phe Ser Arg Glu Arg Asn Arg Ser Asn

180 185

&lt;210&gt; 3239

&lt;211&gt; 403

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3239

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Met Lys Pro Val Lys Lys Lys Lys Thr Glu Glu Pro Glu Leu Glu Pro
  1              5              10              15
Leu Cys Cys Cys Glu Tyr Ile Asp Arg Asn Gly Glu Lys Asn His Val
          20              25              30
Ala Thr Cys Leu Cys Asp Cys Gln Asp Leu Asp Glu Gly Cys Asp Arg
          35              40              45
Trp Ile Thr Cys Lys Ser Leu Gln Pro Glu Thr Cys Glu Arg Ile Met
          50              55              60
Asp Thr Ile Ser Asp Arg Leu Arg Ile Pro Trp Leu Arg Gly Ala Lys
          65              70              75              80
Lys Val Asn Ile Ser Ile Ile Pro Pro Leu Val Leu Leu Pro Val Phe
          85              90              95
Leu His Val Ala Ser Trp His Phe Leu Leu Gly Val Val Val Leu Thr
          100             105             110
Ser Leu Pro Val Leu Ala Leu Trp Tyr Tyr Tyr Leu Thr His Arg Arg
          115             120             125
Lys Glu Gln Thr Leu Phe Phe Leu Ser Leu Gly Leu Phe Ser Leu Gly
          130             135             140
Tyr Met Tyr Tyr Val Phe Leu Gln Glu Val Val Pro Lys Gly Arg Val
          145             150             155             160
Gly Pro Val Gln Leu Ala Val Leu Thr Cys Gly Leu Phe Leu Ile Leu
          165             170             175
Leu Ala Leu His Arg Ala Lys Lys Asn Pro Gly Tyr Leu Ser Asn Pro
          180             185             190
Ala Ser Gly Asp Arg Ser Leu Ser Ser Ser Gln Leu Glu Cys Leu Ser

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195	200	205
Arg Lys Gly Gln Glu Lys Thr	Lys Gly Phe Pro Gly Ala Asp Met Ser	
210	215	220
Gly Ser Leu Asn Asn Arg Thr Thr	Lys Asp Asp Pro Lys Gly Ser Ser	
225	230	235
Lys Met Pro Ala Gly Ser Pro Thr	Lys Ala Lys Glu Asp Trp Cys Ala	
245	250	255
Lys Cys Gln Leu Val Arg Pro Ala Arg	Ala Trp His Cys Arg Ile Cys	
260	265	270
Gly Ile Cys Val Arg Arg Met Asp	His His Cys Val Trp Ile Asn Ser	
275	280	285
Cys Val Gly Glu Ser Asn His Gln Ala	Phe Ile Leu Ala Leu Leu Ile	
290	295	300
Phe Leu Leu Thr Ser Val Tyr Gly Ile	Thr Leu Thr Leu Asp Thr Ile	
305	310	315
Cys Arg Asp Arg Ser Val Phe Thr Ala	Leu Phe Tyr Cys Pro Gly Val	
325	330	335
Tyr Ala Asn Tyr Ser Ser Ala Leu Ser	Phe Thr Cys Val Trp Tyr Ser	
340	345	350
Val Ile Ile Thr Ala Gly Met Ala Tyr	Ile Phe Leu Ile Gln Leu Ile	
355	360	365
Asn Ile Ser Tyr Asn Val Thr Glu Arg	Glu Val Gln Gln Ala Leu Arg	
370	375	380
Gln Lys Thr Gly Arg Arg Leu Leu Cys	Gly Leu Ile Val Asp Thr Gly	
385	390	395
Leu Leu Gly		400

&lt;210&gt; 3240

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3240

Met Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Arg

1 5 10 15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys

20 25 30

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys

35 40 45

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys

50 55 60

Lys Asn Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys

65 70 75 80

Lys Arg Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Arg Arg Lys Arg Arg

85 90 95

Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg

100 105 110

Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg Lys Glu Gly

115 120 125

Lys Leu Thr Leu Tyr His Ala Leu Tyr Val Pro Asp Ile Cys Tyr Val

130 135 140

Thr Gln Leu Ile

145

&lt;210&gt; 3241

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3241

Met Val Ser Arg Pro Arg Ser Pro Ser Ala Phe Pro Ala Pro Trp Trp

1 5 10 15

Gly Gln Gln Pro Gly Gly Pro Gly Pro Ala Lys Arg Leu Arg Leu Glu

20 25 30

Glu Pro Ala Gly Pro Glu Pro Arg Ala Ala Pro Ser Leu Glu Asp Pro

35 40 45

Ala Gly Asp Pro Ala Val Asp Ala Leu Thr Ser Ile Val Val Leu Ala

50 55 60

Ala Gly Cys Ala Leu Arg Val Pro Leu Asp Asp Val Asp Leu Val Leu

65 70 75 80

Glu Pro Ala Pro Thr Ser Ile Leu Arg Val Ser Leu Gly Gly His Thr

85 90 95

Leu Ile Leu Ile Pro Glu Val Leu Leu Ser Ser Val Asp Glu Arg Ser

100 105 110

Gly Ala Gln His Asp Ser Ser Ala Gly Leu Glu Val Asp Val Phe Leu

115 120 125

Gly Ala Val Arg Glu Asp Val Val Val Glu Leu Glu Phe Cys Ala Ser

130 135 140

Val Pro Glu Ile Ala Ala Gln Glu Glu Ala Tyr Glu Glu Asp Ala Asp

145 150 155 160

Pro Glu Phe Pro Glu Leu Arg Met Asp Ser Pro Thr Gly Ser Ala Ala

165 170 175

Gly Leu Tyr Pro Ser Ser Arg Ser Met Phe Ile Pro Tyr Arg Glu Gly

180 185 190

Pro Ile Pro Glu Pro Cys Ala Leu Ala Pro Asn Pro Ser Ser Glu Arg  
 195 200 205  
 Arg Ser Pro Arg Pro Ile Phe Asp Leu Glu Phe Arg Leu Leu Glu Pro  
 210 215 220  
 Val Pro Ser Ser Pro Leu Gln Pro Leu Pro Pro Ser Pro Cys Val Gly  
 225 230 235 240  
 Ser Pro Gly Pro His Ala Arg Ser Pro Leu Pro Glu Arg Pro Pro Cys  
 245 250 255  
 Lys Ala Arg Arg Arg Leu Phe Gln Ala  
 260 265

<210> 3242

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3242

Met Glu Ser Ala Lys Ala Arg Asn Arg Arg Lys Leu His Pro Leu Leu  
 1 5 10 15  
 Ser Trp Gln Gly Arg Ser Leu Ala Leu Pro Arg Cys Ser Cys Gly Thr  
 20 25 30  
 Gln Leu Trp Leu Gln Thr Trp Ala Cys Leu Cys Thr Trp Gly Leu Glu  
 35 40 45  
 Val Gly Arg Ser Pro Thr Phe Pro Gly Thr Pro Thr Ala Ala Gln Ser  
 50 55 60  
 Val Ala Val Asn Leu Ser Ile Ser Ala Leu Ser Gly Ala Leu Glu Ala  
 65 70 75 80  
 Leu Pro Phe His Cys Leu Ala Ser Ser Tyr Ser Lys His Leu Arg Val



<210> 3243

<211> 568

<212> PRT

<213> Homo sapiens

<400> 3243

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Phe Phe Leu Arg Leu His Arg Leu Leu Leu Leu Phe Leu Val Leu Arg  
                     20                                    25                                    30  
 Gly Thr Leu Ala Asn Lys Leu Asn Val Pro Gln Val Leu Leu Pro Phe  
                     35                                    40                                    45  
 Gly Arg Glu Pro Gly Arg Val Pro Phe Leu Leu Glu Ala Gln Arg Gly  
                     50                                    55                                    60  
 Cys Tyr Thr Trp His Ser Thr His His Asp Ala Val Thr Val Glu Pro  
                     65                                    70                                    75                                    80  
 Leu Tyr Glu Asn Gly Thr Leu Cys Ser Gln Lys Ala Val Leu Ile Ala  
                                     85                                    90                                    95  
 Glu Ser Thr Gln Pro Ile Arg Leu Ser Ser Ile Ile Leu Ala Arg Glu  
                     100                                    105                                    110  
 Ile Val Thr Asp His Glu Leu Arg Cys Asp Val Lys Val Asp Val Ile  
                     115                                    120                                    125  
 Asn Ser Ile Glu Ile Val Ser Arg Ala Arg Glu Leu Tyr Val Asp Asp  
                     130                                    135                                    140  
 Ser Pro Leu Glu Leu Met Val Arg Ala Leu Asp Ala Glu Gly Asn Thr  
                     145                                    150                                    155                                    160  
 Phe Ser Ser Leu Ala Gly Met Met Phe Glu Trp Ser Ile Ala Gln Asp  
                                     165                                    170                                    175  
 Asn Glu Ser Ala Arg Glu Glu Leu Ser Ser Lys Ile Arg Ile Leu Lys  
                     180                                    185                                    190  
 Tyr Ser Glu Ala Glu Tyr Ala Pro Pro Ile Tyr Ile Ala Glu Met Glu  
                     195                                    200                                    205  
 Lys Glu Glu Lys Gln Gly Asp Val Ile Leu Val Ser Gly Ile Arg Thr  
                     210                                    215                                    220  
 Gly Ala Ala Val Val Lys Val Arg Ile His Glu Pro Phe Tyr Lys Lys  
                     225                                    230                                    235                                    240  
 Val Ala Ala Ala Leu Ile Arg Leu Leu Val Leu Glu Asn Ile Phe Leu

245 250 255  
Ile Pro Ser His Asp Ile Tyr Leu Leu Val Gly Thr Tyr Ile Lys Tyr  
260 265 270  
Gln Val Ala Lys Met Val Gln Gly Arg Val Thr Glu Val Lys Phe Pro  
275 280 285  
Leu Glu His Tyr Ile Leu Glu Leu Gln Asp His Arg Val Ala Leu Asn  
290 295 300  
Gly Ser His Ser Glu Lys Val Ala Ile Leu Asp Asp Lys Ala Ala Met  
305 310 315 320  
Val Thr Ala Ser Gln Leu Gly Gln Thr Asn Leu Val Phe Val His Lys  
325 330 335  
Asn Val His Met Arg Ser Val Ser Gly Leu Pro Asn Cys Thr Ile Tyr  
340 345 350  
Val Val Glu Pro Gly Phe Leu Gly Phe Thr Val Gln Pro Gly Asn Arg  
355 360 365  
Trp Ser Leu Glu Val Gly Gln Val Tyr Val Ile Thr Val Asp Val Phe  
370 375 380  
Asp Lys Ser Ser Thr Lys Val Tyr Ile Ser Asp Asn Leu Arg Ile Thr  
385 390 395 400  
Tyr Asp Phe Pro Lys Glu Tyr Phe Glu Glu Gln Leu Thr Thr Val Asn  
405 410 415  
Gly Ser Tyr His Ile Val Lys Ala Leu Lys Asp Gly Val Val Val Ile  
420 425 430  
Asn Ala Ser Leu Thr Ser Ile Ile Tyr Gln Asn Lys Asp Ile Gln Pro  
435 440 445  
Ile Lys Phe Leu Ile Lys His Gln Gln Glu Val Lys Ile Tyr Phe Pro  
450 455 460  
Ile Met Leu Thr Pro Lys Phe Leu Ala Phe Pro His His Pro Met Gly  
465 470 475 480

Met Leu Tyr Arg Tyr Lys Val Gln Val Glu Gly Gly Ser Gly Asn Phe  
                             485                            490                            495  
 Thr Trp Thr Ser Ser Asn Glu Thr Val Ile Ile Val Thr Thr Lys Gly  
                             500                            505                            510  
 Val Val Thr Ala Gly Gln Val Arg Gly Asn Ser Thr Val Leu Ala Arg  
                             515                            520                            525  
 Asp Val Gln Asn Pro Phe Arg Tyr Gly Glu Ile Lys Ile His Val Leu  
                             530                            535                            540  
 Lys Leu Asn Lys Met Glu Leu Leu Pro Phe His Ala Asp Val Glu Ile  
                             545                            550                            555                            560  
 Gly Gln Ile Ile Glu Ile Pro Ile  
                             565

<210> 3244

<211> 382

<212> PRT

<213> Homo sapiens

<400> 3244

Met Ala Thr Leu Phe Tyr Gly Leu Ile Asp Gln Thr Arg Glu Phe Leu  
     1                            5                            10                            15  
 His Ala Ala Glu Thr Pro Val Pro Ser Val Gly Glu Tyr Leu Lys Lys  
                             20                            25                            30  
 Glu Ile Gly Gln His Val Ala Gly Trp Thr Glu Asp Glu Glu Thr Arg  
                             35                            40                            45  
 Lys Leu Lys Leu Ala Val Leu Asn Ser Phe Phe Asn Leu Glu Cys Cys  
                             50                            55                            60  
 Val Ser Gly Thr His Ser Met Asp Leu Val Ala Leu Ala Pro Phe Gly

出証特 2 0 0 4 - 3 0 5 9 6 6 1

出証特 2 0 0 4 - 3 0 5 9 6 6 1

<210> 3246

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3246

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Arg Gly Ala Cys Leu Thr Asp Glu Gln Gly Ser Thr Leu Ser Pro Arg

115

120

125

Gln Arg Arg Gly Pro Gly Lys

130

135

<210> 3247

<211> 230

<212> PRT

<213> Homo sapiens

<400> 3247

Met Asn Asn Ile Leu Thr Ser Ala Thr Glu Pro Tyr Asp Leu Ser Phe

1

5

10

15

Ser Arg Ser Phe Gln Asn Leu Ala His Leu Pro Pro Ser Tyr Glu Ser

20

25

30

Ala Val Lys Thr Asn Pro Ser Lys Tyr Ser Ser Leu Lys Arg Leu Thr

35

40

45

Asp Lys Glu Ala Asp Glu Tyr Tyr Met Arg Arg Arg His Leu Pro Asp

50

55

60

Leu Ala Ala Arg Gly Thr Leu Pro Leu Asn Val Ile Gln Met Ser Gln

65

70

75

80

Gln Lys Pro Leu Pro Arg Glu Arg Pro Arg Arg Pro Ile Arg Ala Met

85

90

95

Ser Gln Asp Arg Val Leu Ser Pro Asp Arg Gly Leu Pro Asp Glu Phe

100

105

110

Ser Met Pro Tyr Asp Arg Ile Leu Ser Asp Glu Gln Leu Leu Ser Thr

115

120

125

Glu Arg Leu His Ser Gln Asp Pro Leu Leu Ser Pro Glu Arg Thr Ala



130                      135                      140  
 Phe Pro Glu Gln Ser Leu Ser Arg Ala Ile Ser His Thr Asp Val Phe  
 145                      150                      155                      160  
 Val Ser Thr Pro Val Leu Asp Arg Tyr Arg Met Ser Lys Met His Ser  
                     165                      170                      175  
 His Pro Ser Ala Ser Asn Asn Ser Tyr Ala Thr Leu Gly Gln Ser Gln  
                     180                      185                      190  
 Thr Ala Ala Lys Arg His Ala Phe Ala Ser Arg Arg His Asn Thr Val  
                     195                      200                      205  
 Glu Gln Leu His Tyr Ile Pro Gly His His Thr Cys Tyr Thr Ala Ser  
                     210                      215                      220  
 Lys Thr Glu Val Thr Val  
 225                      230

<210> 3248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3248

Met Pro Pro His Arg Pro Cys Cys Gly Gln Ser His Pro Gly Arg Ala  
                     1                      5                      10                      15  
 His Ser Pro Gln Ala Arg Ala Thr Trp Phe Gln Thr Ser Thr Pro Ile  
                     20                      25                      30  
 Gln Gly Pro Gly Thr Pro Thr Thr Leu Pro Leu Ser Glu Val Phe Ala  
                     35                      40                      45  
 Ala Cys Phe Arg Arg Lys Glu Lys Leu Pro Leu Ser Thr Gly Lys Thr  
                     50                      55                      60

Ala His Leu Leu Pro Pro Ser Pro Ser Pro Pro Pro Pro Pro Ser Val  
 65 70 75 80  
 Phe Pro Val Ser Gln Asn Pro Ile Arg Cys Ser Leu Trp Thr Gly Ile  
 85 90 95  
 Arg Ile Leu Gly Ile Ser Ser Phe Gln Asp Ser Leu Leu His Val Pro  
 100 105 110  
 Leu Leu Pro Pro Ser Ser Thr Phe His Arg  
 115 120

<210> 3249

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3249

Met Asn Met Glu Lys Leu Gly Ser Thr Val Pro Cys Val His Arg Leu  
 1 5 10 15  
 His Ser Glu Thr Lys Cys Pro Gly Leu Lys Arg Thr Leu Ile Arg Pro  
 20 25 30  
 Ala Gly Lys Ala Ser Gly Arg Gln Lys Gly Thr Ala Ala Ser Lys Phe  
 35 40 45  
 Leu Leu Ala Glu Arg Ala Glu Leu Thr Thr Pro Ser Glu Arg Cys Phe  
 50 55 60  
 His Arg Gly Ala Arg Ala Glu Thr Gly Pro Ala Arg His Pro Ser Pro  
 65 70 75 80  
 Ala His Ser Ser Arg Leu Met Leu Leu Arg Gly Lys Ser Ser Phe Ser  
 85 90 95  
 Leu Lys Ser Phe Asn Asn Arg Ile Leu Thr Trp His Arg Thr Ser Pro

100	105	110	
Phe Leu Gly Thr Gln Glu Cys Leu Leu Leu Asp Val Asn Glu Ile Gln			
115	120	125	
Leu Leu Lys Val Ser Pro Gly Val His Gly Val Glu Phe Ile Pro His			
130	135	140	
His Ser Glu Thr Glu Ser Glu Glu Phe Ala Gly Ser Ser Leu Ala Arg			
145	150	155	160
Asn Lys Ser Thr Arg His Leu Tyr Leu Ile Gln Lys Arg Val Ile Tyr			
165	170	175	
Phe His Lys Cys Ile Ala Ala Asp Thr Thr Ser Thr Asn Gln Ser Gly			
180	185	190	
Phe Leu Leu His Ser Arg Gly Pro His Ser Arg Leu Val Ser Ser Arg			
195	200	205	
Arg Pro Ser Asp Lys Cys His Ile Leu Phe Leu			
210	215		

&lt;210&gt; 3250

&lt;211&gt; 633

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3250

Met Leu Arg Arg Gly Tyr Lys Ala Ser Glu Arg Arg Arg His Leu Ser			
1	5	10	15
Glu Arg Leu Ser Trp His Gln Asp Gln Ala Leu Ser Ser Ser Ile Tyr			
20	25	30	
Leu Leu Arg Glu Met Gly Pro Thr Gly Phe Leu Leu Arg Glu Glu Glu			
35	40	45	

Pro Glu Tyr Met Asp Phe Arg Val Phe Leu Gly Asn Pro His Val Cys  
 50 55 60  
 Asn Cys Ser Thr Phe Pro Lys Gly Gly Glu Leu Cys Lys His Ile Cys  
 65 70 75 80  
 Trp Val Leu Leu Lys Lys Phe Lys Leu Pro Arg Asn His Glu Ser Ala  
 85 90 95  
 Leu Gln Leu Gly Leu Gly Glu Arg Glu Ile Ser Asp Leu Leu Arg Gly  
 100 105 110  
 Ile His Arg Val Gln Thr Pro Gln Pro Gly Thr Asn Asp Glu Asn Glu  
 115 120 125  
 His Val Glu Glu Asp Gly Tyr Ile Lys Gln Lys Glu Ile Asp Ser Glu  
 130 135 140  
 Asp Ile Cys Ser Ile Cys Gln Glu Leu Leu Leu Glu Lys Lys Leu Pro  
 145 150 155 160  
 Val Thr Phe Cys Arg Phe Gly Cys Gly Asn Ser Ile His Ile Lys Cys  
 165 170 175  
 Met Lys Ile Leu Ala Asn Tyr Gln Ser Thr Ser Asn Thr Ser Met Leu  
 180 185 190  
 Lys Cys Pro Leu Cys Arg Lys Glu Phe Ala Pro Leu Lys Leu Ile Leu  
 195 200 205  
 Glu Glu Phe Lys Asn Ser Ser Lys Leu Val Ala Ala Ala Glu Lys Glu  
 210 215 220  
 Arg Leu Asp Lys His Leu Gly Ile Pro Cys Asn Asn Cys Lys Gln Phe  
 225 230 235 240  
 Pro Ile Glu Gly Lys Cys Tyr Lys Cys Thr Glu Cys Ile Glu Tyr His  
 245 250 255  
 Leu Cys Gln Glu Cys Phe Asp Ser Cys Cys His Leu Ser His Thr Phe  
 260 265 270  
 Thr Phe Arg Glu Lys Arg Asn Gln Lys Trp Arg Ser Leu Glu Lys Arg

275	280	285
Ala Asp Glu Val Val Lys Tyr Ile Asp Thr Lys Asn Glu Ile Glu Glu		
290	295	300
Lys Met Ser His Phe Gln Glu Lys Gln Gly Gln Val Tyr Thr Pro Lys		
305	310	315
His Ile Val Arg Ser Leu Pro Leu Gln Leu Ile Thr Lys Asn Ser Lys		
325	330	335
Leu Leu Ala Pro Gly Tyr Gln Cys Leu Leu Cys Leu Lys Ala Phe His		
340	345	350
Leu Gly Gln His Thr Arg Leu Leu Pro Cys Thr His Lys Phe His Arg		
355	360	365
Lys Cys Ile Asp Asn Trp Leu Phe His Lys Cys Asn Ser Cys Pro Ile		
370	375	380
Asp Gly Gln Val Ile Tyr Asn Pro Leu Thr Trp Lys Asn Ser Ala Val		
385	390	395
Asn Gly Gln Ala His Gln Ser Val Ser Asn Arg Asp Ile Ile His Leu		
405	410	415
Ser Lys Gln Lys Glu Pro Asp Leu Phe Ile Pro Gly Thr Gly Leu Val		
420	425	430
Leu Lys Gln Asn Arg Leu Gly Ile Leu Pro Ser Ile Pro Gln Cys Asn		
435	440	445
Phe Asp Glu Leu Asn Thr Pro Gln Ser Pro Lys Asp Ala Tyr Glu Asn		
450	455	460
Thr Thr Ile Asp Asn Leu Cys Ser Ile Lys Leu Asp Asn Ser Asn Ser		
465	470	475
Lys Lys Leu Thr Tyr Asp Tyr Lys Ile Ser Gln His Phe Pro Arg Tyr		
485	490	495
Leu Gln Asp Leu Pro Thr Val Ser Phe Gly Lys Ile Pro Ser Gln Thr		
500	505	510

Leu Leu Pro Pro Ile Val His Lys Asn Ile Val Cys Pro Thr Ala Met  
 515 520 525  
 Glu Ser Pro Cys Ile Ser Gly Lys Phe His Thr Ser Leu Ser Arg Met  
 530 535 540  
 Thr Lys Gly Cys Lys Cys Asn Asn His Asn Leu Lys Lys Thr Pro Ala  
 545 550 555 560  
 Thr Lys Ile Arg Glu Asp Asn Lys Arg Ser Thr Leu Leu Pro Glu Asp  
 565 570 575  
 Phe Asn Leu Ile Val Asn Trp Ser Thr Ala Lys Leu Ser Leu Ser Lys  
 580 585 590  
 Arg Tyr Ser Asn Cys Met Gly Glu Ile Thr Arg Lys Cys Ser His Leu  
 595 600 605  
 Ser Arg Gln Pro Val Ser His Ser Val Asn Thr Lys Ser Thr Glu Leu  
 610 615 620  
 Ser Leu Ile Ile Glu Gly Val Gln Leu  
 625 630

<210> 3251

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3251

Met Ser Leu Glu Gly Ala Ala Gly Cys Lys Ala Asp Phe Trp Gly Lys  
 1 5 10 15  
 Trp Val Asn Ala Ser Met Arg Val Ile Leu Ala Asp Arg Cys Thr Gly  
 20 25 30  
 Ala Ile Gly Lys Val Arg Thr Thr Gln Ala Ala Val Gly Arg Ala Asn

35                      40                      45  
 Arg Phe Thr Phe Arg Leu Ser Val Gly Arg Trp Glu Arg Gln Glu Leu  
 50                      55                      60  
 Thr Pro Gly Ser Trp Gly Arg Pro Thr Glu Thr Tyr Leu Ala Ala Gln  
 65                      70                      75                      80  
 Ala Gly Ser Phe Ala Gly Gly Tyr Thr Leu Thr Ser Asp Thr Leu Leu  
 85                      90                      95  
 Arg Ala Val Phe Ser Phe Gly Asp Ile His Gly Ala Pro Thr Val Ser  
 100                      105                      110  
 Pro Ala Pro His Thr Gln Ser Cys Arg Pro Glu Thr Ser Lys Ile Gln  
 115                      120                      125  
 Ser Leu Cys Leu Pro Pro Ser Pro Arg Leu Ser Gly Ser Phe Gly Trp  
 130                      135                      140  
 Arg His Met  
 145

&lt;210&gt; 3252

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3252

Met Lys Lys His Asp Pro Asp Phe Leu Gly Cys Pro Gly Arg Ala Cys  
 1                      5                      10                      15  
 Trp Ser Thr Gly Leu Val Ala Lys Ala Pro Arg Cys Ala His Pro Ser  
 20                      25                      30  
 Ser Pro His Leu His Ala Ala Pro Gly Val Ser Gln Ser Gly Leu Cys  
 35                      40                      45

Gly Leu Lys Pro Ile Arg Ala Gly Gly Trp Ala Cys Leu Val Gly Ala  
 50 55 60  
 Arg Arg Trp Trp Gln Ser Arg Tyr Arg Val Phe Pro Ser Ser Ser Pro  
 65 70 75 80  
 Leu Pro Ser Phe Leu Pro Leu Ser Ala Leu Leu Gln Ala Leu Ser Leu  
 85 90 95  
 Cys Ser Gln Leu Pro Gln Arg Arg Cys Ser Ile Met Phe Ser Pro Arg  
 100 105 110  
 Glu Thr Gly Ser Thr Tyr Phe  
 115

<210> 3253

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3253

Met Gln Ser Gln Ala Gly Arg Ala Arg Pro Ala Gln Pro Gly Phe Pro  
 1 5 10 15  
 Leu Gln Asp Cys Ala Pro Pro His Val His Ala Gly Trp Asp Cys Asn  
 20 25 30  
 Pro Val Ala Leu Gln Leu Lys Asn Trp Glu Leu Ile Lys Asp Asp Lys  
 35 40 45  
 Ser Gln Tyr Ala Arg Arg Ser Ser Arg Pro Pro Ile His Thr Phe Pro  
 50 55 60  
 Ser Pro Glu Gln Phe Cys His Ala Lys Gly Glu Pro Gly Cys Ser Arg  
 65 70 75 80  
 Thr Ser Leu Ala Cys Gln Val Thr Ala Arg Pro Gly Gly Leu Ser Tyr



	85	90	95
Arg Val Ile Met Ser Leu Pro Leu Pro Glu Met Leu Ala Ser Cys Phe			
100	105	110	
Val Ile Ala Arg Ser Leu Ile Ser His Gly Ala Ala Gly Asp Leu Glu			
115	120	125	
Leu Leu Ala Lys Leu Ser Arg Leu Pro Tyr Leu Gly Ala Val Leu Ala			
130	135	140	
Pro Pro Leu Leu Leu Ala Pro Leu Leu Pro Ser Ala Leu Pro Leu Pro			
145	150	155	160
Ser Ala Pro Pro Leu Arg Leu Ala Pro Pro Leu Thr Arg Pro Leu			
165	170	175	

&lt;210&gt; 3254

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3254

Met Ala Trp Leu Asp Ser Arg Asn Thr Ser Leu Pro Ser Leu Gly Phe			
1	5	10	15
Cys Leu Leu Leu Leu Pro Leu His Pro Ala Pro Leu Leu Pro Thr Thr			
20	25	30	
Pro Thr Pro Ala Leu Cys Pro Gly Leu Val His Ser Gln Gly His Pro			
35	40	45	
Ser Ala Cys Pro His Phe Pro His Gly Tyr Ser Arg Gly Gln Gln Cys			
50	55	60	
Leu Glu Gln Ala Asp Trp Glu Thr Ala Val Leu Leu Phe Ser Arg Ala			
65	70	75	80

Leu His Leu Asp Pro Gln Leu Gly Gln Cys Leu Phe Glu Gln Cys Ala			
	85	90	95
Phe Leu Asp Ala Leu Asn Val Phe Ser His Ala Ala Glu Leu Gln Pro			
	100	105	110
Glu Lys Pro Cys Phe Arg Tyr Arg Cys Met Ala Cys Leu Leu Ala Leu			
	115	120	125
Lys Gln His Gln Ala Cys Leu Thr Leu Ile Thr Asn Glu Leu Lys Gln			
	130	135	140
Asp Thr Thr Asn Ala Asp Val Tyr Ile Phe Arg Ala Arg Leu Tyr Asn			
	145	150	155
Phe Leu Gln Lys Pro His Leu Cys Tyr Arg Asp Leu His Ser Ala Leu			
	165	170	175
Leu Leu Asn Pro Lys His Pro Gln Ala Arg Met Leu Leu Gln Lys Met			
	180	185	190
Val Ala Gln Ala Gln Gln Ala Arg Gln Asp Ala Gly Ile Leu Ala Val			
	195	200	205
Gln Gly Lys Leu Ala Ala Arg Thr Ala Ala Asp Gln Pro Cys His Arg			
	210	215	220
Glu Gln Pro Ser Gly Pro Gln Ser Leu Pro Leu Pro Gly His His Val			
	225	230	235
Pro Thr Ala Pro Gly Val Arg Trp Gly Ser Gly Gly Leu Pro Glu Gly			
	245	250	255
Ala Gly His Gly Asp Arg Gly Pro Gly Gly His Gly Ala Ala Gly Thr			
	260	265	270
Ala Pro Ala Val Ala Asp Leu Gln Arg Leu Cys Arg Ala Leu Leu Gln			
	275	280	285
Ala Gly Arg Leu Pro Gly Gly Arg Ala Ala Ala Glu Gln Gly Pro Pro			
	290	295	300
Gly Arg Ala Ala Gly Glu Arg Thr Leu His Gln Pro Arg Arg Gln Phe			

305                      310                      315                      320  
Gln Lys Ala Glu Asn His Phe Ser Thr Ala Ile Arg His Asn Pro Gln  
                         325                      330                      335  
Lys Ala Gln Tyr Tyr Leu Tyr Arg Ala Lys Ser Arg Gln Leu Leu Gln  
                         340                      345                      350  
Asn Ile Phe Gly Ala Arg Gln Asp Val Ala Thr Val Leu Leu Leu Asn  
                         355                      360                      365  
Pro Lys Gln Pro Lys Asp Ala  
                         370                      375

<210> 3255

<211> 211

<212> PRT

<213> Homo sapiens

<400> 3255

Met Ala Gln Pro Pro Pro Asp Val Glu Gly Asp Asp Cys Leu Pro Ala  
1                      5                      10                      15  
Tyr Arg His Leu Phe Cys Pro Asp Leu Leu Arg Asp Lys Val Ala Phe  
                         20                      25                      30  
Ile Thr Gly Gly Gly Ser Gly Ile Gly Phe Arg Ile Ala Glu Ile Phe  
                         35                      40                      45  
Met Arg Ala Ser Glu Asp Gln Met Gly His Cys Ser Ser Ser Gly Thr  
                         50                      55                      60  
Cys Leu Ala Gly Val Ala Thr Phe Met Val Ile Val Gly Lys Gln Pro  
65                      70                      75                      80  
Pro Asn Gln Lys Ser Arg Glu Thr Lys Glu Gln Gly Arg Gln Ile Pro  
                         85                      90                      95

Phe Val Cys Val Arg His Gly Cys His Thr Val Ile Ala Ser Arg Ser  
                   100                          105                          110  
 Leu Pro Arg Val Leu Thr Ala Ala Arg Lys Leu Ala Gly Ala Thr Gly  
                   115                          120                          125  
 Arg Arg Cys Leu Pro Leu Ser Met Asp Val Arg Ala Pro Pro Ala Val  
                   130                          135                          140  
 Met Ala Ala Val Asp Gln Ala Leu Lys Glu Phe Gly Arg Ile Asp Ile  
                   145                          150                          155                          160  
 Leu Ile Asn Cys Ser Ser Ser Ser Cys Gly Leu Pro Phe Cys Arg Cys  
                                   165                          170                          175  
 Gly Arg Glu Leu Pro Val Pro Arg Trp Arg Leu Val Leu Gln Arg Leu  
                   180                          185                          190  
 Gln Asp Arg Asp Gly His Arg Tyr Gln Arg His Leu Gln Cys Val Ser  
                   195                          200                          205  
 Cys Ala Leu  
                   210

&lt;210&gt; 3256

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3256

Met Glu Thr Leu His Ile Ile Tyr Ser Glu Ala Lys Ser Phe Thr Val  
           1                          5                          10                          15  
 Glu Gly Leu Ser Ser Arg Thr Arg Val Arg Glu Leu Gln Gly Gln Ile  
                   20                          25                          30  
 Ala Ala Ile Thr Gly Ile Ala Pro Gly Gly Gln Arg Ile Phe Val Gly

35	40	45
Tyr Pro Pro Glu Cys Leu Asp Leu Ser Asn Gly Asp Thr Ile Leu Glu		
50	55	60
Asp Leu Pro Ile Gln Ser Gly Asp Met Leu Ile Ile Glu Glu Asp Gln		
65	70	75
Thr Arg Pro Arg Ser Ser Pro Ala Phe Thr Lys Arg Gly Ala Ser Ser		
85	90	95
Tyr Val Arg Glu Thr Leu Pro Val Leu Thr Arg Thr Val Val Pro Ala		
100	105	110
Asp Asn Ser Cys Leu Phe Thr Ser Val Tyr Tyr Val Val Glu Gly Gly		
115	120	125
Val Leu Asn Pro Ala Cys Ala Pro Glu Met Arg Arg Leu Ile Ala Gln		
130	135	140
Ile Val Ala Ser Asp Pro Asp Phe Tyr Ser Glu Ala Ile Leu Gly Lys		
145	150	155
Thr Asn Gln Glu Tyr Cys Asp Trp Ile Lys Arg Asp Asp Thr Trp Gly		
165	170	175
Gly Ala Ile Glu Ile Ser Ile Leu Ser Lys Phe Tyr Gln Cys Glu Ile		
180	185	190
Cys Val Val Asp Thr Gln Thr Val Arg Ile Asp Arg Phe Gly Glu Asp		
195	200	205
Ala Gly Tyr Thr Lys Arg Val Leu Leu Ile Tyr Asp Gly Ile His Tyr		
210	215	220
Asp Pro Leu Gln Arg Asn Phe Pro Asp Pro Asp Thr Pro Pro Leu Thr		
225	230	235
Ile Phe Ser Ser Asn Asp Asp Ile Val Leu Val Gln Ala Leu Glu Leu		
245	250	255
Ala Asp Glu Ala Arg Arg Arg Arg Gln Phe Thr Asp Val Asn Arg Phe		
260	265	270

Thr Leu Arg Cys Met Val Cys Gln Lys Gly Leu Thr Gly Gln Ala Glu  
275 280 285  
Ala Arg Glu His Ala Lys Glu Thr Gly His Thr Asn Phe Gly Glu Val  
290 295 300

<210> 3257

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3257

Met Val His Gln Arg Ile Ala Ser Trp Gln Asn Leu Gly Ala Val Tyr  
1 5 10 15  
Cys Ser Thr Val Val Pro Ser Asp Asp Val Thr Val Val Tyr Gln Asn  
20 25 30  
Gly Leu Pro Val Ile Ser Val Arg Leu Pro Ser Arg Arg Glu Arg Cys  
35 40 45  
Gln Phe Thr Leu Lys Pro Ile Ser Asp Ser Val Gly Val Phe Leu Arg  
50 55 60  
Gln Leu Gln Glu Glu Asp Arg Gly Ile Asp Arg Val Ala Ile Tyr Ser  
65 70 75 80  
Pro Asp Gly Val Arg Val Ala Ala Ser Thr Gly Ile Asp Leu Leu Leu  
85 90 95  
Leu Asp Asp Phe Lys Leu Val Ile Asn Asp Leu Thr Tyr His Val Arg  
100 105 110  
Pro Pro Lys Arg Asp Leu Leu Ser His Glu Asn Ala Ala Thr Leu Asn  
115 120 125  
Asp Val Lys Thr Leu Val Gln Gln Leu Tyr Thr Thr Leu Cys Ile Glu

130 135 140  
Gln His Gln Leu Asn Lys Glu Arg Glu Leu Ile Glu Arg Leu Glu Asp  
145 150 155 160  
Leu Lys Glu Gln Leu Ala Pro Leu Glu Lys Val Arg Ile Glu Ile Ser  
165 170 175  
Arg Lys Ala Glu Lys Arg Thr Thr Leu Val Leu Trp Gly Gly Leu Ala  
180 185 190  
Tyr Met Ala Thr Gln Phe Gly Ile Leu Ala Arg Leu Thr Trp Trp Glu  
195 200 205  
Tyr Ser Trp Asp Ile Met Glu Pro Val Thr Tyr Phe Ile Thr Tyr Gly  
210 215 220  
Ser Ala Met Ala Met Tyr Ala Tyr Phe Val Met Thr Arg Gln Glu Tyr  
225 230 235 240  
Val Tyr Pro Glu Ala Arg Asp Arg Gln Tyr Leu Leu Phe Phe His Lys  
245 250 255  
Gly Ala Lys Lys Ser Arg Phe Asp Leu Glu Lys Tyr Asn Gln Leu Lys  
260 265 270  
Asp Ala Ile Ala Gln Ala Glu Met Asp Leu Lys Arg Leu Arg Asp Pro  
275 280 285  
Leu Gln Val His Leu Pro Leu Arg Gln Ile Gly Glu Lys Asp  
290 295 300

&lt;210&gt; 3258

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3258

Met Ala Ala Ala Lys Ser Gly Ala Gly Gly Ala Ser Arg Pro Pro Leu  
 1 5 10 15  
 Pro Leu Leu Arg Glu Ala Leu Ser Lys Arg Arg Thr Ala Pro Val Thr  
 20 25 30  
 Arg Pro Ser Arg Thr Ala Thr Ala Ala Leu Gly Lys Ala Ser Thr Pro  
 35 40 45  
 Ala His Arg Ser Ala Pro Ser Pro Glu Pro Pro Ser Ile Ser Pro Pro  
 50 55 60  
 Arg Gly Leu Ala Ser Ala Leu Ser Phe Pro Gln Ser Arg Leu Leu Val  
 65 70 75 80  
 Gly Arg Asn Gln Leu Arg Gly Asp Gly Gly Ser Gly Cys Gly Leu His  
 85 90 95  
 Gly His Arg Ser Pro Glu Val Ala Asn Gln Arg Thr Glu  
 100 105

<210> 3259

<211> 595

<212> PRT

<213> Homo sapiens

<400> 3259

Met Ile Leu Ala Pro Glu Gly Ser Ser Ser Gly Lys Leu Arg Ile Pro  
 1 5 10 15  
 Ala Ala Gln Glu Arg Asp Ala Gly Thr Tyr Thr Cys Arg Ala Val Asn  
 20 25 30  
 Glu Leu Gly Asp Ala Ser Ala Glu Ile Gln Leu Ala Val Gly His Ala  
 35 40 45  
 Pro Gln Leu Thr Glu Leu Pro Arg Asp Val Thr Val Glu Leu Gly Arg



出証特 2 0 0 4 - 3 0 5 9 6 6 1

Ser Lys Glu Gly Thr Leu Leu Ile Ala Gln Pro Ser Ala Gln Asp Ala  
 290 295 300  
 Gly Ala Tyr Val Cys Thr Ala Thr Asn Thr Val Gly Phe Ser Ser Gln  
 305 310 315 320  
 Glu Met Arg Leu Ser Val Asn Thr Lys Pro Arg Ile His Met Asn Gly  
 325 330 335  
 Ser Arg Asn Ala Asp Val Pro Leu Gln Val Thr Ala Lys Ala Gly Glu  
 340 345 350  
 Glu Val Thr Leu Asp Cys Glu Ala Lys Gly Ser Pro Pro Pro Leu Val  
 355 360 365  
 Thr Trp Thr Lys Asp Ser Arg Pro Val Pro Pro Ile Thr Asn Arg Tyr  
 370 375 380  
 Gly Leu Leu Pro Ser Gly Ser Leu Arg Leu Ala Gln Val Gln Val Gly  
 385 390 395 400  
 Asp Ser Gly His Tyr Glu Cys Thr Ala Ser Asn Pro Ala Gly Ser Ala  
 405 410 415  
 Ser His Arg Tyr Val Leu Gly Val Gln Gly Arg Thr Ser Trp Gln Pro  
 420 425 430  
 Gln Ser Leu Pro Val Pro His His Pro Ala Cys Leu Ser Gly Leu Ser  
 435 440 445  
 Val Pro Leu Leu Gln Pro Thr Pro Arg Ser Val Arg Leu Cys His Leu  
 450 455 460  
 Ser Leu Arg Ala Pro Leu Pro Pro Pro Phe Ala Thr Pro Thr Ser Cys  
 465 470 475 480  
 Leu Ser Gln Ala Cys Leu Ser Ser Ser Thr Leu Ser Leu His Leu Ser  
 485 490 495  
 Pro Tyr Pro Leu Arg Gly Pro Gly Asp Ala Val Gln Arg Pro Pro Thr  
 500 505 510  
 Thr Gln Gly Arg Ala Gln Trp Gly Leu Gly Phe Gly Arg Thr Gly Val

515                                      520                                      525  
 Arg Gly Glu Pro Met Lys Val Gly Leu Arg Gly Ser Leu Pro Gly Thr  
 530                                      535                                      540  
 Arg Gly Pro Ala Gly Ser Pro Gly Cys Gly Asp Gly Lys Arg Pro Val  
 545                                      550                                      555                                      560  
 Arg Cys His Arg Ala Pro Pro Ala Gly Ser Ile Leu Met Pro Pro Arg  
 565                                      570                                      575  
 Gly Pro Ser Glu Pro Leu Leu Pro Pro Leu Pro Ser Thr Arg His Phe  
 580                                      585                                      590  
 Val His Leu  
 595

<210> 3260

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3260

Met Val Val Val Glu Pro Gly Asp Thr Leu Ser Ser Pro Glu Phe Asp  
 1                                      5                                      10                                      15  
 Ser Gly Pro Phe Ser Ser Gln Ser Asp Glu Thr Ser Leu Ser Thr Thr  
 20                                      25                                      30  
 Ala Ser Ser Ala Thr Pro Thr Ser Glu Leu Leu Pro Leu Gly Pro Val  
 35                                      40                                      45  
 Asp Gly Arg Ser Cys Ser Met Asp Ser Ala Tyr Gly Thr Leu Ser Pro  
 50                                      55                                      60  
 Thr Ser Leu Gln Asp Phe Val Ala Pro Gly Pro Met Ala Glu Leu Val  
 65                                      70                                      75                                      80

Pro Arg Ala Pro Glu Ser Pro Arg Val Pro Ser Pro Pro Pro Ser Pro  
                             85                            90                            95  
 Arg Leu Arg Arg Arg Thr Pro Val Gln Leu Leu Ser Cys Pro Pro His  
                             100                            105                            110  
 Leu Leu Lys Ser Lys Ser Glu Ala Ser Leu Leu Gln Leu Leu Ala Gly  
                             115                            120                            125  
 Ala Gly Thr His Gly Thr Pro Ser Ala Pro Ser Arg Ser Leu Ser Glu  
                             130                            135                            140  
 Leu Cys Leu Ala Val Pro Ala Pro Gly Ile Arg Thr Gln Gly Ser Pro  
 145                            150                            155                            160  
 Gln Glu Ala Gly Pro Ser Trp Asp Cys Arg Gly Ala Pro Ser Pro Gly  
                             165                            170                            175  
 Ser Gly Pro Gly Leu Val Gly Cys Leu Ala Gly Glu Pro Ala Gly Ser  
                             180                            185                            190  
 His Arg Lys Arg Cys Gly Asp Leu Pro Ser Gly Ala Ser Pro Arg Val  
                             195                            200                            205  
 Gln Pro Glu Pro Pro Pro Gly Val Ser Ala Gln His Arg Lys Leu Thr  
                             210                            215                            220  
 Leu Ala Gln Leu Tyr Arg Ile Arg Thr Thr Leu Leu Leu Asn Ser Thr  
 225                            230                            235                            240  
 Leu Thr Ala Ser

&lt;210&gt; 3261

&lt;211&gt; 896

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3261

Met Met Ala Gln Lys Ser Gln Gly Ser Asp Asn Leu Gln Glu Gly Gln  
 1 5 10 15  
 Glu Lys Ser Lys Arg Glu Ile Leu Lys Cys Thr Lys Ser Ala Trp Ala  
 20 25 30  
 Pro Leu Asp Glu Trp Leu Pro Pro Asp Pro Glu Glu Glu Ser Gln Ser  
 35 40 45  
 Leu Thr Ile Pro Met Leu Glu Asp Ser Lys Gln Glu Ser Ile Gln Gln  
 50 55 60  
 Trp Leu Asp Ser Gly Phe Phe Val Ser Ala Asn Glu Asn Phe Gln Gln  
 65 70 75 80  
 Val Ile Asp Arg Thr Val Ser Leu Tyr Glu Gln Gly Met Val Gln Met  
 85 90 95  
 Thr Val Lys Asp Tyr Met Arg Ser Leu His Gln Phe Ser Glu Thr Pro  
 100 105 110  
 Ile Leu Ser Arg Gly Thr Ser Phe Asn Ser Cys Tyr Ser Thr Ala Ser  
 115 120 125  
 Val Pro Gln Ser Ile Pro Glu Trp Leu Glu Phe Trp Glu Ile Asp Pro  
 130 135 140  
 Val Glu Ile Leu Leu Asp Leu Gly Phe Gly Ala Asp Glu Pro Asp Ile  
 145 150 155 160  
 Cys Met Gln Ile Pro Ala Arg Phe Leu Gly Cys Gly Ser Ala Ala Arg  
 165 170 175  
 Gly Ile Asn Ile Arg Val Phe Leu Glu Ala Gln Lys Gln Arg Met Asp  
 180 185 190  
 Ile Glu Asn Pro Asn Leu Tyr Gly Arg Phe Arg Gln Leu Glu Ile Leu  
 195 200 205  
 Asp His Val Thr Asn Ala Phe Ser Ser Leu Leu Ser Asp Val Ser Ile  
 210 215 220

Leu Pro Asn Arg Ala Glu Glu Lys Ala Gly Gly Glu Ser Val Gln Arg  
225 230 235 240  
Thr Ser Val Gln Ser Phe Glu Glu Glu Thr Gly Asn Pro Leu Asp Met  
245 250 255  
Thr Ser Gly Thr Val Gly Ala Arg Val Asp Arg Ala Asn Ser Cys Gln  
260 265 270  
Ser Asp Ser Ser Gly Phe Leu Glu Glu Pro Leu Glu Pro Leu Pro Leu  
275 280 285  
Gln Met Pro Ser Leu Pro Asn Ser Gln Ser Pro Ala Glu Asn Gly Gly  
290 295 300  
Arg Lys Pro Arg Asp Gln Ser His Ser Leu Val Ser Ser Gln Asp Cys  
305 310 315 320  
Gln Leu Glu Ser Asp Gly Pro Asp Ser Lys Ser Arg Ala Ser Met Ser  
325 330 335  
Phe Ser Ser Gln Glu Val Asn Ala Leu Glu Gln Arg Ala Ser Val Ser  
340 345 350  
Val Met Glu Glu Glu Phe Leu Leu Glu Ala Met Glu Gly Pro Pro Glu  
355 360 365  
Leu Tyr Ile Pro Asp Met Ala Cys Ala Lys Thr Thr Thr Arg Gly Glu  
370 375 380  
Cys Pro Arg Lys Asp Ser His Leu Trp Gln Leu Leu Pro Met Pro His  
385 390 395 400  
Ala Glu Tyr Glu Val Thr Arg Pro Thr Ala Thr Ser Lys Tyr Asp His  
405 410 415  
Pro Leu Gly Phe Met Val Thr His Val Thr Glu Met Gln Asp Ser Phe  
420 425 430  
Val Arg Pro Glu Gly Ala Gly Lys Val Gln Ser His His Asn Glu Ser  
435 440 445  
Gln Arg Ser Pro Gly Asn Asp His Thr Gln Asp Lys Phe Leu His Val

450 455 460  
Asp Ser Glu Ala Pro Arg Glu Glu Glu Ser Ser Gly Phe Cys Pro His  
465 470 475 480  
Thr Asn His Ser Leu Leu Val Pro Glu Ser Ser Ser Gln Cys Ile Pro  
485 490 495  
Lys His Ser Glu Ile Thr Pro Tyr Ala Thr Asp Leu Ala Gln Thr Ser  
500 505 510  
Glu Lys Leu Ile Pro His Leu His Lys Leu Pro Gly Asp Pro Ala Gln  
515 520 525  
Val Lys Ser Arg Ser Gly Thr Leu Gly Gln Ile Leu Pro Gly Thr Glu  
530 535 540  
Ala Glu Met Glu Asn Leu Pro Leu Asn Thr Gly Ser Ser Arg Ser Val  
545 550 555 560  
Met Thr Gln Met Ser Ser Ser Leu Val Ser Ala Ala Gln Arg Ala Val  
565 570 575  
Ala Leu Gly Thr Gly Pro Arg Gly Thr Ser Leu Glu Cys Thr Val Cys  
580 585 590  
Asp Pro Val Thr Ala Thr Glu Thr Arg Leu Gly Thr Lys Ala Arg Gln  
595 600 605  
Leu Asn Asp Ala Ser Ile Gln Thr Ser Ala Leu Ser Asn Lys Thr Leu  
610 615 620  
Thr His Gly Pro Gln Pro Leu Thr Lys Ser Val Ser Leu Asp Ser Gly  
625 630 635 640  
Phe Ser Ser Ile Cys Pro Met Gly Thr Cys His Ala Ile Ser Ala His  
645 650 655  
Cys Cys Ile Cys Tyr His His His Pro His Cys His Gly Glu Arg Gln  
660 665 670  
Ser Pro Gly Pro Glu Pro Ser Val Cys Arg His Cys Leu Cys Ser Leu  
675 680 685

Thr Gly His Gln Glu Ala Gln Phe Met Thr Thr Leu Lys Ala Leu Gln  
690 695 700

Asp Thr Thr Val Arg Glu Leu Cys Ser Cys Thr Val His Glu Met Glu  
705 710 715 720

Ala Met Lys Thr Ile Cys Gln Ser Phe Arg Glu Tyr Leu Glu Glu Ile  
725 730 735

Glu Gln His Leu Met Gly Gln Gln Ala Leu Phe Ser Arg Asp Met Ser  
740 745 750

Glu Glu Glu Arg Glu Glu Ala Glu Gln Leu Gln Thr Leu Arg Glu Ala  
755 760 765

Leu Arg Gln Gln Val Ala Glu Leu Glu Phe Gln Leu Gly Asp Arg Ala  
770 775 780

Gln Gln Ile Arg Glu Gly Ile Leu Leu Gln Leu Glu Val Leu Thr Ala  
785 790 795 800

Glu Pro Pro Glu His Tyr Ser Asn Leu His Gln Tyr Asn Trp Ile Glu  
805 810 815

Glu Ser Asn Gly Gln Thr Ser Cys Ser Lys Ile His Pro Gly Met Ala  
820 825 830

Pro Arg Thr Val Phe Pro Pro Asp Asp Gly Gln Glu Ala Pro Cys Ser  
835 840 845

Gly Gly Thr Gln Leu Ala Ala Phe Thr Pro Pro Thr Leu Glu Asn Ser  
850 855 860

Thr Arg Met Ser Pro Ser Ser Ser Ala Trp Ala Lys Leu Gly Pro Thr  
865 870 875 880

Pro Leu Ser Asn Cys Pro Val Gly Glu Lys Asp Ala Asp Val Phe Leu  
885 890 895

&lt;210&gt; 3262



&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3262

Met Pro Gln Ala Ala His Ser Val Ser Ala Val Leu Glu Lys Ala Gln

1 5 10 15

Thr His Ala Glu Thr Ser Lys Asp Lys Lys Pro Ala Leu Gly Asn Arg

20 25 30

Gln Glu His Ser Gly Pro Arg Thr Ala Pro Ser Pro Ala Cys Pro Ala

35 40 45

Ser Ser Gly Ala Glu Val Gln Gly Tyr Gln Gln Gln Pro Arg His Ala

50 55 60

Pro Pro Arg Pro Arg Thr Gln Ala Ala Gly Ala Ser Pro Pro Cys Gln

65 70 75 80

Thr Thr Ser Cys Arg His Ser His His Pro Trp Thr Thr Gln Ser Ser

85 90 95

Arg Arg Pro Trp Thr Ser Cys Ser Leu Pro Pro Arg Ser Pro Arg Gly

100 105 110

Leu Leu Met Pro His Pro Arg Lys Arg His Glu Ala Ser Met Phe Arg

115 120 125

Ser Ser Lys

130

&lt;210&gt; 3263

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3263

Met Pro Met Lys Pro Pro Arg Cys Thr Arg Thr Ser Arg Ser Ser Cys  
 1 5 10 15  
 Ser Arg Thr Thr Leu Arg Pro Ala Ala Ser Pro Asn Thr Thr Ser Ser  
 20 25 30  
 Arg Gly Gln Thr Val His Pro Pro Cys Ser Ser Lys Leu Arg Met Asp  
 35 40 45  
 Pro Thr Pro Ala Trp Pro Ala Ser Cys Glu Ala Leu Met Gly Pro Ser  
 50 55 60  
 Ser Ser Ala Gly Pro Ala Arg Leu Arg Leu Pro Pro Arg Arg His Ser  
 65 70 75 80  
 Ser Leu Pro Pro Arg Arg Ala Ser Phe Leu Ile Val Ser Arg Ala Ser  
 85 90 95  
 Lys Ser Trp Glu Cys Ala Gly Pro Val Pro Ala Leu Pro Gly Gly Val  
 100 105 110  
 Val Ala Val Pro Thr Ser Gln Gln Asp Pro Gln Cys Arg Gly Ser Gln  
 115 120 125  
 Val Ala His Arg Arg Cys Leu Ser Arg Ala Ile Leu Gln Ser Gly Pro  
 130 135 140  
 Gln Cys Gln Ser Cys Leu Ser Ile Trp Val Thr Ser Ala Arg Ser Arg  
 145 150 155 160  
 Val Gln Ala Ser Ser Arg Ser  
 165

&lt;210&gt; 3264

&lt;211&gt; 2427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3264

Met Gln Ser Ser Pro Ser Pro Ala His Pro Gln Leu Pro Val Leu Gln  
1 5 10 15  
Thr Gln Met Val Ser Asp Gly Met Thr Gly Ser Asn Pro Val Ser Pro  
20 25 30  
Ala Ser Ser Ser Ser Pro Ala Ser Ser Gly Ala Gly Gly Ile Ser Pro  
35 40 45  
Gln His Ile Ala Gln Asp Ser Ser Leu Asp Gly Pro Pro Gly Pro Pro  
50 55 60  
Asp Gly Ala Thr Val Pro Leu Glu Gly Phe Ser Leu Ser Gln Ala Ala  
65 70 75 80  
Asp Leu Ala Asn Lys Gly Pro Lys Trp Glu Lys Ser His Ala Glu Ile  
85 90 95  
Ala Glu Gln Ala Lys His Glu Ala Glu Ile Glu Thr Arg Ile Ala Glu  
100 105 110  
Leu Arg Lys Glu Gly Phe Trp Ser Leu Lys Arg Leu Pro Lys Val Pro  
115 120 125  
Glu Pro Pro Arg Pro Lys Gly His Trp Asp Tyr Leu Cys Glu Glu Met  
130 135 140  
Gln Trp Leu Ser Ala Asp Phe Ala Gln Glu Arg Arg Trp Lys Arg Gly  
145 150 155 160  
Val Ala Arg Lys Val Val Arg Met Val Ile Arg His His Glu Glu Gln  
165 170 175  
Arg Gln Lys Glu Glu Arg Ala Arg Arg Glu Glu Gln Ala Lys Leu Arg  
180 185 190  
Arg Ile Ala Ser Thr Met Ala Lys Asp Val Arg Gln Phe Trp Ser Asn  
195 200 205

Val Glu Lys Val Val Gln Phe Lys Gln Gln Ser Arg Leu Glu Glu Lys  
 210 215 220  
 Arg Lys Lys Ala Leu Asp Leu His Leu Asp Phe Ile Val Gly Gln Thr  
 225 230 235 240  
 Glu Lys Tyr Ser Asp Leu Leu Ser Gln Ser Leu Asn Gln Pro Leu Thr  
 245 250 255  
 Ser Ser Lys Ala Gly Ser Ser Pro Cys Leu Gly Ser Ser Ser Ala Ala  
 260 265 270  
 Ser Ser Pro Pro Pro Pro Ala Ser Arg Leu Asp Asp Glu Asp Gly Asp  
 275 280 285  
 Phe Gln Pro Gln Glu Asp Glu Glu Glu Asp Asp Glu Glu Thr Ile Glu  
 290 295 300  
 Val Glu Glu Gln Gln Glu Gly Asn Asp Ala Glu Ala Gln Arg Arg Glu  
 305 310 315 320  
 Ile Glu Leu Leu Arg Arg Glu Gly Glu Leu Pro Leu Glu Glu Leu Leu  
 325 330 335  
 Arg Ser Leu Pro Pro Gln Leu Leu Glu Gly Pro Ser Ser Pro Ser Gln  
 340 345 350  
 Thr Pro Ser Ser His Asp Ser Asp Thr Arg Asp Gly Pro Glu Glu Gly  
 355 360 365  
 Ala Glu Glu Glu Pro Pro Gln Val Leu Glu Ile Lys Pro Pro Pro Ser  
 370 375 380  
 Ala Val Thr Gln Arg Asn Lys Gln Pro Trp His Pro Asp Glu Asp Asp  
 385 390 395 400  
 Glu Glu Phe Thr Ala Asn Glu Glu Glu Ala Glu Asp Glu Glu Asp Thr  
 405 410 415  
 Ile Ala Ala Glu Glu Gln Leu Glu Gly Glu Val Asp His Ala Met Glu  
 420 425 430  
 Leu Ser Glu Leu Ala Arg Glu Gly Glu Leu Ser Met Glu Glu Leu Leu

435 440 445  
Gln Gln Tyr Ala Gly Ala Tyr Ala Pro Gly Ser Gly Ser Ser Glu Asp  
450 455 460  
Glu Asp Glu Asp Glu Val Asp Ala Asn Ser Ser Asp Cys Glu Pro Glu  
465 470 475 480  
Gly Pro Val Glu Ala Glu Glu Pro Pro Gln Glu Asp Ser Ser Ser Gln  
485 490 495  
Ser Asp Ser Val Glu Asp Arg Ser Glu Asp Glu Glu Asp Glu His Ser  
500 505 510  
Glu Glu Glu Glu Thr Ser Gly Ser Ser Ala Ser Glu Glu Ser Glu Ser  
515 520 525  
Glu Glu Ser Glu Asp Ala Gln Ser Gln Ser Gln Ala Asp Glu Glu Glu  
530 535 540  
Glu Asp Asp Asp Phe Gly Val Glu Tyr Leu Leu Ala Arg Asp Glu Glu  
545 550 555 560  
Gln Ser Glu Ala Asp Ala Gly Ser Gly Pro Pro Thr Pro Gly Pro Thr  
565 570 575  
Thr Leu Gly Pro Lys Lys Glu Ile Thr Asp Ile Ala Ala Ala Ala Glu  
580 585 590  
Ser Leu Gln Pro Lys Gly Tyr Thr Leu Ala Thr Thr Gln Val Lys Thr  
595 600 605  
Pro Ile Pro Leu Leu Leu Arg Gly Gln Leu Arg Glu Tyr Gln His Ile  
610 615 620  
Gly Leu Asp Trp Leu Val Thr Met Tyr Glu Lys Lys Leu Asn Gly Ile  
625 630 635 640  
Leu Ala Asp Glu Met Gly Leu Gly Lys Thr Ile Gln Thr Ile Ser Leu  
645 650 655  
Leu Ala His Leu Ala Cys Glu Lys Gly Asn Trp Gly Pro His Leu Ile  
660 665 670

Ile Val Pro Thr Ser Val Met Leu Asn Trp Glu Met Glu Leu Lys Arg  
675 680 685

Trp Cys Pro Ser Phe Lys Ile Leu Thr Tyr Tyr Gly Ala Gln Lys Glu  
690 695 700

Arg Lys Leu Lys Arg Gln Gly Trp Thr Lys Pro Asn Ala Phe His Val  
705 710 715 720

Cys Ile Thr Ser Tyr Lys Leu Val Leu Gln Asp His Gln Ala Phe Arg  
725 730 735

Arg Lys Asn Trp Arg Tyr Leu Ile Leu Asp Glu Ala Gln Asn Ile Lys  
740 745 750

Asn Phe Lys Ser Gln Arg Trp Gln Ser Leu Leu Asn Phe Asn Ser Gln  
755 760 765

Arg Arg Leu Leu Leu Thr Gly Thr Pro Leu Gln Asn Ser Leu Met Glu  
770 775 780

Leu Trp Ser Leu Met His Phe Leu Met Pro His Val Phe Gln Ser His  
785 790 795 800

Arg Glu Phe Lys Glu Trp Phe Ser Asn Pro Leu Thr Gly Met Ile Glu  
805 810 815

Gly Ser Gln Glu Tyr Asn Glu Gly Leu Val Lys Arg Leu His Lys Val  
820 825 830

Leu Arg Pro Phe Leu Leu Arg Arg Val Lys Val Asp Val Glu Lys Gln  
835 840 845

Met Pro Lys Lys Tyr Glu His Val Ile Arg Cys Arg Leu Ser Lys Arg  
850 855 860

Gln Arg Cys Leu Tyr Asp Asp Phe Met Ala Gln Thr Thr Thr Lys Glu  
865 870 875 880

Thr Leu Ala Thr Gly His Phe Met Ser Val Ile Asn Ile Leu Met Gln  
885 890 895

Leu Arg Lys Val Cys Asn His Pro Asn Leu Phe Asp Pro Arg Pro Val

900 905 910  
Thr Ser Pro Phe Ile Thr Pro Gly Ile Cys Phe Ser Thr Ala Ser Leu  
915 920 925  
Val Leu Arg Ala Thr Asp Val His Pro Leu Gln Arg Ile Asp Met Gly  
930 935 940  
Arg Phe Asp Leu Ile Gly Leu Glu Gly Arg Val Ser Arg Tyr Glu Ala  
945 950 955 960  
Asp Thr Phe Leu Pro Arg His Arg Leu Ser Arg Arg Val Leu Leu Glu  
965 970 975  
Val Ala Thr Ala Pro Asp Pro Pro Pro Arg Pro Lys Pro Val Lys Met  
980 985 990  
Lys Val Asn Arg Met Leu Gln Pro Val Pro Lys Gln Glu Gly Arg Thr  
995 1000 1005  
Val Val Val Val Asn Asn Pro Arg Ala Pro Leu Gly Pro Val Pro Val  
1010 1015 1020  
Arg Pro Pro Pro Gly Pro Glu Leu Ser Ala Gln Pro Thr Pro Gly Pro  
1025 1030 1035 1040  
Val Pro Gln Val Leu Pro Ala Ser Leu Met Val Ser Ala Ser Pro Ala  
1045 1050 1055  
Gly Pro Pro Leu Ile Pro Ala Ser Arg Pro Pro Gly Pro Val Leu Leu  
1060 1065 1070  
Pro Pro Leu Gln Pro Asn Ser Gly Ser Leu Pro Gln Val Leu Pro Ser  
1075 1080 1085  
Pro Leu Gly Val Leu Ser Gly Thr Ser Arg Pro Pro Thr Pro Thr Leu  
1090 1095 1100  
Ser Leu Lys Pro Thr Pro Pro Ala Pro Val Arg Leu Ser Pro Ala Pro  
1105 1110 1115 1120  
Pro Pro Gly Ser Ser Ser Leu Leu Lys Pro Leu Thr Val Pro Pro Gly  
1125 1130 1135

Tyr Thr Phe Pro Pro Ala Ala Ala Thr Thr Ala Ser Thr Thr Thr Ala  
1140 1145 1150  
Thr Ala Thr Thr Thr Ala Val Pro Ala Pro Thr Pro Ala Pro Gln Arg  
1155 1160 1165  
Leu Ile Leu Ser Pro Asp Met Gln Ala Arg Leu Pro Ser Gly Glu Val  
1170 1175 1180  
Val Ser Ile Gly Gln Leu Ala Ser Leu Ala Gln Arg Pro Val Ala Asn  
1185 1190 1195 1200  
Ala Gly Gly Ser Lys Pro Leu Thr Phe Gln Ile Gln Gly Asn Lys Leu  
1205 1210 1215  
Thr Leu Thr Gly Ala Gln Val Arg Gln Leu Ala Val Gly Gln Pro Arg  
1220 1225 1230  
Pro Leu Gln Arg Asn Val Val His Leu Val Ser Ala Gly Gly Gln His  
1235 1240 1245  
His Leu Ile Ser Gln Pro Ala His Val Ala Leu Ile Gln Ala Val Ala  
1250 1255 1260  
Pro Thr Pro Gly Pro Thr Pro Val Ser Val Leu Pro Ser Ser Thr Pro  
1265 1270 1275 1280  
Ser Thr Thr Pro Ala Pro Thr Gly Leu Ser Leu Pro Leu Ala Ala Asn  
1285 1290 1295  
Gln Val Pro Pro Thr Met Val Asn Asn Thr Gly Val Val Lys Ile Val  
1300 1305 1310  
Val Arg Gln Ala Pro Arg Asp Gly Leu Thr Pro Val Pro Pro Leu Ala  
1315 1320 1325  
Pro Ala Pro Arg Pro Pro Ser Ser Gly Leu Pro Ala Val Leu Asn Pro  
1330 1335 1340  
Arg Pro Thr Leu Thr Pro Gly Arg Leu Pro Thr Pro Thr Leu Gly Thr  
1345 1350 1355 1360  
Ala Arg Ala Pro Met Pro Thr Pro Thr Leu Val Arg Pro Leu Leu Lys



1365 1370 1375  
Leu Val His Ser Pro Ser Pro Glu Val Ser Ala Ser Ala Pro Gly Ala  
1380 1385 1390  
Ala Pro Leu Thr Ile Ser Ser Pro Leu His Val Pro Ser Ser Leu Pro  
1395 1400 1405  
Gly Pro Ala Ser Ser Pro Met Pro Ile Pro Asn Ser Ser Pro Leu Ala  
1410 1415 1420  
Ser Pro Val Ser Ser Thr Val Ser Val Pro Leu Ser Ser Ser Leu Pro  
1425 1430 1435 1440  
Ile Ser Val Pro Thr Thr Leu Pro Ala Pro Ala Ser Ala Pro Leu Thr  
1445 1450 1455  
Ile Pro Ile Ser Ala Pro Leu Thr Val Ser Ala Ser Gly Pro Ala Leu  
1460 1465 1470  
Leu Thr Ser Val Thr Pro Pro Leu Ala Pro Val Val Pro Ala Ala Pro  
1475 1480 1485  
Gly Pro Pro Ser Leu Ala Pro Ser Gly Ala Ser Pro Ser Ala Ser Ala  
1490 1495 1500  
Leu Thr Leu Gly Leu Ala Thr Ala Pro Ser Leu Ser Ser Ser Gln Thr  
1505 1510 1515 1520  
Pro Gly His Pro Leu Leu Leu Ala Pro Thr Ser Ser His Val Pro Gly  
1525 1530 1535  
Leu Asn Ser Thr Val Ala Pro Ala Cys Ser Pro Val Leu Val Pro Ala  
1540 1545 1550  
Ser Ala Leu Ala Ser Pro Phe Pro Ser Ala Pro Asn Pro Ala Pro Ala  
1555 1560 1565  
Gln Ala Ser Leu Leu Ala Pro Ala Ser Ser Ala Ser Gln Ala Leu Ala  
1570 1575 1580  
Thr Pro Leu Ala Pro Met Ala Ala Pro Gln Thr Ala Ile Leu Ala Pro  
1585 1590 1595 1600

Ser Pro Ala Pro Pro Leu Ala Pro Leu Pro Val Leu Ala Pro Ser Pro  
1605 1610 1615  
Gly Ala Ala Pro Val Leu Ala Ser Ser Gln Thr Pro Val Pro Val Met  
1620 1625 1630  
Ala Pro Ser Ser Thr Pro Gly Thr Ser Leu Ala Ser Ala Ser Pro Val  
1635 1640 1645  
Pro Ala Pro Thr Pro Val Leu Ala Pro Ser Ser Thr Gln Thr Met Leu  
1650 1655 1660  
Pro Ala Pro Val Pro Ser Pro Leu Pro Ser Pro Ala Ser Thr Gln Thr  
1665 1670 1675 1680  
Leu Ala Leu Ala Pro Ala Leu Ala Pro Thr Leu Gly Gly Ser Ser Pro  
1685 1690 1695  
Ser Gln Thr Leu Ser Leu Gly Thr Gly Asn Pro Gln Gly Pro Phe Pro  
1700 1705 1710  
Thr Gln Thr Leu Ser Leu Thr Pro Ala Ser Ser Leu Val Pro Thr Pro  
1715 1720 1725  
Ala Gln Thr Leu Ser Leu Ala Pro Gly Pro Pro Leu Gly Pro Thr Gln  
1730 1735 1740  
Thr Leu Ser Leu Ala Pro Ala Pro Pro Leu Ala Pro Ala Ser Pro Val  
1745 1750 1755 1760  
Gly Pro Ala Pro Ala His Thr Leu Thr Leu Ala Pro Ala Ser Ser Ser  
1765 1770 1775  
Ala Ser Leu Leu Ala Pro Ala Ser Val Gln Thr Leu Thr Leu Ser Pro  
1780 1785 1790  
Ala Pro Val Pro Thr Leu Gly Pro Ala Ala Ala Gln Thr Leu Ala Leu  
1795 1800 1805  
Ala Pro Ala Ser Thr Gln Ser Pro Ala Ser Gln Ala Ser Ser Leu Val  
1810 1815 1820  
Val Ser Ala Ser Gly Ala Ala Pro Leu Pro Val Thr Met Val Ser Arg

1825                      1830                      1835                      1840  
Leu Pro Val Ser Lys Asp Glu Pro Asp Thr Leu Thr Leu Arg Ser Gly  
                         1845                      1850                      1855  
Pro Pro Ser Pro Pro Ser Thr Ala Thr Ser Phe Gly Gly Pro Arg Pro  
                         1860                      1865                      1870  
Arg Arg Gln Pro Pro Pro Pro Arg Ser Pro Phe Tyr Leu Asp Ser  
                         1875                      1880                      1885  
Leu Glu Glu Lys Arg Lys Arg Gln Arg Ser Glu Arg Leu Glu Arg Ile  
                         1890                      1895                      1900  
Phe Gln Leu Ser Glu Ala His Gly Ala Leu Ala Pro Val Tyr Gly Thr  
1905                      1910                      1915                      1920  
Glu Val Leu Asp Phe Cys Thr Leu Pro Gln Pro Val Ala Ser Pro Ile  
                         1925                      1930                      1935  
Gly Pro Arg Ser Pro Gly Pro Ser His Pro Thr Phe Trp Thr Tyr Thr  
                         1940                      1945                      1950  
Glu Ala Ala His Arg Ala Val Leu Phe Pro Gln Gln Arg Leu Asp Gln  
                         1955                      1960                      1965  
Leu Ser Glu Ile Ile Glu Arg Phe Ile Phe Val Met Pro Pro Val Glu  
                         1970                      1975                      1980  
Ala Pro Pro Pro Ser Leu His Ala Cys His Pro Pro Pro Trp Leu Ala  
1985                      1990                      1995                      2000  
Pro Arg Gln Ala Ala Phe Gln Glu Gln Leu Ala Ser Glu Leu Trp Pro  
                         2005                      2010                      2015  
Arg Ala Arg Pro Leu His Arg Ile Val Cys Asn Met Arg Thr Gln Phe  
                         2020                      2025                      2030  
Pro Asp Leu Arg Leu Ile Gln Tyr Asp Cys Gly Lys Leu Gln Thr Leu  
                         2035                      2040                      2045  
Ala Val Leu Leu Arg Gln Leu Lys Ala Glu Gly His Arg Val Leu Ile  
                         2050                      2055                      2060

Phe Thr Gln Met Thr Arg Met Leu Asp Val Leu Glu Gln Phe Leu Thr  
2065 2070 2075 2080  
Tyr His Gly His Leu Tyr Leu Arg Leu Asp Gly Ser Thr Arg Val Glu  
2085 2090 2095  
Gln Arg Gln Ala Leu Met Glu Arg Phe Asn Ala Asp Lys Arg Ile Phe  
2100 2105 2110  
Cys Phe Ile Leu Ser Thr Arg Ser Gly Gly Val Gly Val Asn Leu Thr  
2115 2120 2125  
Gly Ala Asp Thr Val Val Phe Tyr Asp Ser Asp Trp Asn Pro Thr Met  
2130 2135 2140  
Asp Ala Gln Ala Gln Asp Arg Cys His Arg Ile Gly Gln Thr Arg Asp  
2145 2150 2155 2160  
Val His Ile Tyr Arg Leu Ile Ser Glu Arg Thr Val Glu Glu Asn Ile  
2165 2170 2175  
Leu Lys Lys Ala Asn Gln Lys Arg Met Leu Gly Asp Met Ala Ile Glu  
2180 2185 2190  
Gly Gly Asn Phe Thr Thr Ala Tyr Phe Lys Gln Gln Thr Ile Arg Glu  
2195 2200 2205  
Leu Phe Asp Met Pro Leu Glu Glu Pro Ser Ser Ser Ser Val Pro Ser  
2210 2215 2220  
Ala Pro Glu Glu Glu Glu Glu Thr Val Ala Ser Lys Gln Thr His Ile  
2225 2230 2235 2240  
Leu Glu Gln Ala Leu Cys Arg Ala Glu Asp Glu Glu Asp Ile Arg Ala  
2245 2250 2255  
Ala Thr Gln Ala Lys Ala Glu Gln Val Ala Glu Leu Ala Glu Phe Asn  
2260 2265 2270  
Glu Asn Asp Gly Phe Pro Ala Gly Glu Gly Glu Glu Ala Gly Arg Pro  
2275 2280 2285  
Gly Ala Glu Asp Glu Glu Met Ser Arg Ala Glu Gln Glu Ile Ala Ala

2290                      2295                      2300  
 Leu Val Glu Gln Leu Thr Pro Ile Glu Arg Tyr Ala Met Lys Phe Leu  
 2305                      2310                      2315                      2320  
 Glu Ala Ser Leu Glu Glu Val Ser Arg Glu Glu Leu Lys Gln Ala Glu  
                          2325                      2330                      2335  
 Glu Gln Val Glu Ala Ala Arg Lys Asp Leu Asp Gln Ala Lys Glu Glu  
                          2340                      2345                      2350  
 Val Phe Arg Leu Pro Gln Glu Glu Glu Glu Gly Pro Gly Ala Gly Asp  
                          2355                      2360                      2365  
 Glu Ser Ser Cys Gly Thr Gly Gly Gly Thr His Arg Arg Ser Lys Lys  
                          2370                      2375                      2380  
 Ala Lys Ala Pro Glu Arg Pro Gly Thr Arg Val Ser Glu Arg Leu Arg  
 2385                      2390                      2395                      2400  
 Gly Ala Arg Ala Glu Thr Gln Gly Ala Asn His Thr Pro Val Ile Ser  
                          2405                      2410                      2415  
 Ala His Gln Thr Arg Ser Thr Thr Thr Pro Pro  
                          2420                      2425

<210> 3265

<211> 1385

<212> PRT

<213> Homo sapiens

<400> 3265

Met Ala Pro Gly Pro Ile Glu Leu Arg Ala His Ala Ile Leu Val Ser  
 1                      5                      10                      15  
 Asp Gly Gly Glu Leu Arg Ile Gly Ser Glu Asp Lys Pro Phe Gln Gly  
                          20                      25                      30

Arg Ala Gln Ile Thr Leu Tyr Gly Ser Ser Tyr Ser Thr Pro Phe Phe  
35 40 45  
Pro Tyr Gly Val Lys Phe Leu Ala Val Arg Asn Gly Thr Leu Ser Leu  
50 55 60  
His Gly Ser Leu Pro Glu Val Ile Val Thr Cys Leu Arg Ala Thr Ala  
65 70 75 80  
His Ala Leu Asp Thr Val Leu Ala Leu Glu Asp Ala Val Asp Trp Asn  
85 90 95  
Pro Gly Asp Glu Val Val Ile Ile Ser Gly Thr Gly Val Lys Gly Ala  
100 105 110  
Lys Pro Met Glu Glu Ile Val Thr Val Glu Thr Val Gln Asp Thr Asp  
115 120 125  
Leu Tyr Leu Lys Ser Pro Leu Arg Tyr Ser His Asn Phe Thr Glu Asn  
130 135 140  
Trp Val Ala Gly Glu His His Ile Leu Lys Ala Thr Val Ala Leu Leu  
145 150 155 160  
Ser Arg Ser Ile Thr Ile Gln Gly Asn Leu Thr Asn Glu Arg Glu Lys  
165 170 175  
Leu Leu Val Ser Cys Gln Glu Ala Asn Ala Pro Glu Gly Asn Leu Gln  
180 185 190  
His Cys Leu Tyr Ser Met Ser Glu Lys Met Leu Gly Ser Arg Asp Met  
195 200 205  
Gly Ala Arg Val Ile Val Gln Ser Phe Pro Glu Glu Pro Ser Gln Val  
210 215 220  
Gln Leu Lys Gly Val Gln Phe Gln Val Leu Gly Gln Ala Phe His Lys  
225 230 235 240  
His Leu Ser Ser Leu Thr Leu Val Gly Ala Met Arg Gly Thr Cys Thr  
245 250 255  
Glu Met Arg Tyr Ile Ser Trp Glu Ala Ile His Gly Arg Lys Asp Asp

260 265 270  
Trp Ser Gly His Gly Asn Ile Ile Arg Asn Asn Val Ile Ile Gln Val  
275 280 285  
Ser Gly Ala Glu Gly Leu Ser Asn Pro Glu Met Leu Thr Pro Ser Gly  
290 295 300  
Ile Tyr Ile Cys Ser Pro Thr Asn Val Ile Glu Gly Asn Arg Val Cys  
305 310 315 320  
Gly Ala Gly Tyr Gly Tyr Phe Phe His Leu Met Thr Asn Gln Thr Ser  
325 330 335  
Gln Ala Pro Leu Leu Ser Phe Thr Gln Asn Ile Ala His Ser Cys Thr  
340 345 350  
Arg Tyr Gly Leu Phe Val Tyr Pro Lys Phe Gln Pro Pro Trp Asp Asn  
355 360 365  
Val Thr Gly Thr Thr Leu Phe Gln Ser Phe Thr Val Trp Glu Ser Ala  
370 375 380  
Gly Gly Ala Gln Ile Phe Arg Ser Ser Asn Leu Arg Leu Lys Asn Phe  
385 390 395 400  
Lys Val Tyr Ser Cys Arg Asp Phe Gly Ile Asp Val Leu Glu Ser Asp  
405 410 415  
Ala Asn Thr Ser Val Thr Asp Ser Leu Leu Leu Gly His Phe Ala His  
420 425 430  
Lys Gly Ser Leu Cys Met Ser Ser Gly Ile Lys Thr Pro Lys Arg Trp  
435 440 445  
Glu Leu Met Val Ser Asn Thr Thr Phe Val Asn Phe Asp Leu Ile Asn  
450 455 460  
Cys Val Ala Ile Arg Thr Cys Ser Asp Cys Ser Gln Gly Gln Gly Gly  
465 470 475 480  
Phe Thr Val Lys Thr Ser Gln Leu Lys Phe Thr Asn Ser Ser Asn Leu  
485 490 495

Val Ala Phe Pro Phe Pro His Ala Ala Ile Leu Glu Asp Leu Asp Gly  
500 505 510  
Ser Leu Ser Gly Lys Asn Arg Ser His Ile Leu Ala Ser Met Glu Thr  
515 520 525  
Leu Ser Ala Ser Cys Leu Val Asn Ser Ser Phe Gly Arg Val Val His  
530 535 540  
Gly Ser Ala Cys Gly Gly Gly Val Leu Phe His Arg Met Ser Ile Gly  
545 550 555 560  
Leu Ala Asn Thr Pro Glu Val Ser Tyr Asp Leu Thr Met Thr Asp Ser  
565 570 575  
Arg Asn Lys Thr Thr Thr Val Asn Tyr Val Arg Asp Thr Leu Ser Asn  
580 585 590  
Pro Arg Gly Trp Val Ala Leu Leu Leu Asp Gln Glu Thr Tyr Ser Leu  
595 600 605  
Gln Ser Glu Asn Leu Trp Ile Asn Arg Ser Leu Gln Tyr Ser Ala Thr  
610 615 620  
Phe Asp Asn Phe Ala Pro Gly Asn Tyr Leu Leu Leu Val His Thr Asp  
625 630 635 640  
Leu Pro Pro Tyr Pro Asp Ile Leu Leu Arg Cys Gly Ser Arg Val Gly  
645 650 655  
Leu Ser Phe Pro Phe Leu Pro Ser Pro Gly Gln Asn Gln Gly Cys Asp  
660 665 670  
Trp Phe Phe Asn Ser Gln Leu Arg Gln Leu Thr Tyr Leu Val Ser Gly  
675 680 685  
Glu Gly Gln Val Gln Val Ile Leu Arg Val Lys Glu Gly Met Pro Pro  
690 695 700  
Thr Ile Ser Ala Ser Thr Ser Ala Pro Glu Ser Ala Leu Lys Trp Ser  
705 710 715 720  
Leu Pro Glu Thr Trp Gln Gly Val Glu Glu Gly Trp Gly Gly Tyr Asn



725	730	735
Asn Thr Ile Pro Gly Pro Gly Asp Asp Val Leu Ile Leu Pro Asn Arg		
740	745	750
Thr Val Leu Val Asp Thr Asp Leu Pro Phe Phe Lys Gly Leu Tyr Val		
755	760	765
Met Gly Thr Leu Asp Phe Pro Val Asp Arg Ser Asn Val Leu Ser Val		
770	775	780
Ala Cys Met Val Ile Ala Gly Gly Glu Leu Lys Val Gly Thr Leu Glu		
785	790	795
800		
Asn Pro Leu Glu Lys Glu Gln Lys Leu Leu Ile Leu Leu Arg Ala Ser		
805	810	815
Glu Gly Val Phe Cys Asp Arg Met Asn Gly Ile His Ile Asp Pro Gly		
820	825	830
Thr Ile Gly Val Tyr Gly Lys Val His Leu Tyr Ser Ala Tyr Pro Lys		
835	840	845
Asn Ser Trp Thr His Leu Gly Ala Asp Ile Ala Ser Gly Asn Glu Arg		
850	855	860
Ile Ile Val Glu Asp Ala Val Asp Trp Arg Pro His Asp Lys Ile Val		
865	870	875
880		
Leu Ser Ser Ser Ser Tyr Glu Pro His Glu Ala Glu Val Leu Thr Val		
885	890	895
Lys Glu Val Lys Gly His His Val Arg Ile Tyr Glu Arg Leu Lys His		
900	905	910
Arg His Ile Gly Ser Val His Val Thr Glu Asp Gly Arg His Ile Arg		
915	920	925
Leu Ala Ala Glu Val Gly Leu Leu Thr Arg Asn Ile Gln Ile Gln Pro		
930	935	940
Asp Val Ser Cys Arg Gly Arg Leu Phe Val Gly Ser Phe Arg Lys Ser		
945	950	955
960		

Ser Arg Glu Glu Phe Ser Gly Val Leu Gln Leu Leu Asn Val Glu Ile  
965 970 975  
Gln Asn Phe Gly Ser Pro Leu Tyr Ser Ser Val Glu Phe Ser Asn Val  
980 985 990  
Ser Ala Gly Ser Trp Ile Ile Ser Ser Thr Leu His Gln Ser Cys Gly  
995 1000 1005  
Gly Gly Ile His Ala Ala Ala Ser His Gly Val Leu Leu Asn Asp Asn  
1010 1015 1020  
Ile Val Phe Gly Thr Ala Gly His Gly Ile Asp Leu Glu Gly Gln Ala  
1025 1030 1035 1040  
Tyr Thr Val Thr Asn Asn Leu Val Val Leu Met Thr Gln Pro Ala Trp  
1045 1050 1055  
Ser Thr Ile Trp Val Ala Gly Ile Lys Val Asn Gln Val Lys Asp Ile  
1060 1065 1070  
Asn Leu His Gly Asn Val Val Ala Gly Ser Glu Arg Leu Gly Phe His  
1075 1080 1085  
Ile Arg Gly His Lys Cys Ser Ser Cys Glu Leu Leu Trp Ser Asp Asn  
1090 1095 1100  
Val Ala His Ser Ser Leu His Gly Leu His Leu Tyr Lys Glu Ser Gly  
1105 1110 1115 1120  
Leu Asp Asn Cys Thr Arg Ile Ser Gly Phe Leu Ala Phe Lys Asn Phe  
1125 1130 1135  
Asp Tyr Gly Ala Met Leu His Val Glu Asn Ser Val Glu Ile Glu Asn  
1140 1145 1150  
Ile Thr Leu Val Asp Asn Thr Ile Gly Leu Leu Ala Val Val Tyr Val  
1155 1160 1165  
Phe Phe Ala Pro Gln Asn Ser Val Lys Lys Val Gln Ile Val Leu Arg  
1170 1175 1180  
Asn Ser Val Ile Val Ala Thr Ser Ser Ser Phe Asp Cys Ile Gln Asp

1185                      1190                      1195                      1200  
Lys Val Lys Pro His Ser Ala Asn Leu Thr Ser Thr Asp Arg Ala Pro  
                         1205                      1210                      1215  
Ser Asn Pro Arg Gly Gly Arg Ile Gly Ile Leu Trp Pro Val Phe Thr  
                         1220                      1225                      1230  
Ser Glu Pro Asn Gln Trp Pro Gln Glu Pro Trp His Lys Val Arg Asn  
                         1235                      1240                      1245  
Asp His Ser Ile Ser Gly Ile Met Lys Leu Gln Asp Val Thr Phe Ser  
                         1250                      1255                      1260  
Ser Phe Val Lys Ser Cys Tyr Ser Asp Asp Leu Asp Val Cys Ile Leu  
1265                      1270                      1275                      1280  
Pro Asn Ala Glu Asn Ser Gly Ile Met His Pro Ile Thr Ala Glu Arg  
                         1285                      1290                      1295  
Thr Arg Met Leu Lys Ile Lys Asp Lys Asn Lys Phe Tyr Phe Pro Ser  
                         1300                      1305                      1310  
Leu Gln Pro Arg Lys Asp Leu Gly Lys Val Val Cys Pro Glu Leu Asp  
                         1315                      1320                      1325  
Cys Ala Ser Pro Arg Lys Tyr Leu Phe Lys Asp Leu Asp Gly Arg Ala  
                         1330                      1335                      1340  
Leu Gly Leu Pro Pro Pro Val Ser Val Phe Pro Lys Thr Glu Ala Glu  
1345                      1350                      1355                      1360  
Trp Thr Ala Ser Phe Phe Asn Ala Gly Leu Leu Gly Thr Lys Glu Glu  
                         1365                      1370                      1375  
Phe Pro Tyr Val Leu Tyr Pro Leu Pro  
                         1380                      1385

&lt;210&gt; 3266

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3266

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Met Ala His Pro Arg Pro Pro Val Pro Gly Pro Trp Ala Ala Pro Pro
  1             5             10             15
Arg Ala Cys Leu Tyr Arg Val Pro Leu Leu Ser Thr Asp Val Tyr Cys
      20             25             30
Val Asp Gly Pro Arg Phe Ser Pro Gln Ser Thr Leu Asp Gly Arg Ser
      35             40             45
Gly Cys Phe Cys Leu Met Ala Leu Val Pro Gly Ala Ala Val Arg Val
      50             55             60
Tyr Pro Arg Val Ser Val Gln Arg Arg Val Tyr Ala Ser Leu Cys Ser
      65             70             75             80
Tyr Gln Val Trp Ser Cys Trp Ala Val Cys Asn Cys Val Gln Ser Phe
      85             90             95
Glu Glu Pro Pro Ala Gly Val Leu Ala Ala Pro Thr Leu Asp Thr Thr
      100            105            110
Leu Val Pro Ala Gly Ser Cys Leu
      115            120

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&lt;210&gt; 3267

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3267

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Met His Thr Leu Ala Cys Val Ser Leu Leu Glu Pro His Gln Ala Gly

```

1                      5                      10                      15  
 Pro Leu Pro Gly Thr Lys Phe Phe Leu Phe Leu Ser Phe Phe Phe Phe  
                          20                      25                      30  
 Leu Phe Leu Ser Phe Ser Phe Ser Phe Phe Leu Phe Ser Leu Pro Ser  
                          35                      40                      45  
 Phe Leu Pro Ser Phe Leu Pro Ser Phe Leu Pro Ser Phe Pro Phe Leu  
                          50                      55                      60  
 Phe Phe Ser Phe Tyr Cys Asp Met Ile Leu Ala His Cys Asn Leu Ser  
 65                      70                      75                      80  
 Leu Leu Gly Ser Ser Asp Ser Thr Ala Ser Ala Ser Lys Val Ala Gly  
                          85                      90                      95  
 Ile Thr Gly Leu His His His Ala Arg Leu Ile Phe Cys Ile Phe Ser  
                          100                      105                      110  
 Arg Asp Ser Val Ser Pro Cys Trp Pro Gly Trp Ser Pro Ser Pro Asp  
                          115                      120                      125  
 Leu Arg  
 130

<210> 3268

<211> 681

<212> PRT

<213> Homo sapiens

<400> 3268

Met Lys Lys Pro Ile Cys Lys Thr Thr Glu Pro Tyr Ala Pro Val Arg  
 1                      5                      10                      15  
 Leu Arg Val Leu Gln Asn Gly Glu Lys Asn Lys Asn Arg Ser Val Thr  
                          20                      25                      30

Ile Leu Gly Pro Asp Ile Ser Pro Gly Arg Lys Thr Gln Ser Val His  
 35 40 45  
 Thr Glu Lys Lys Glu Lys Ile Cys Val Thr Lys Tyr Ser Gly Ile Glu  
 50 55 60  
 Met Asp Gln Val Glu Phe His Gln Phe Leu Glu Arg Cys Thr Glu Ile  
 65 70 75 80  
 Leu Asn Leu Pro Ser Ala Ala Arg Arg Leu Tyr Asn Glu Lys Gly Lys  
 85 90 95  
 Glu Ile Phe Ala Leu Lys Asn Leu Gln Arg Asp Glu Leu Val Tyr Val  
 100 105 110  
 Ser Cys Gly Glu Leu Trp Ile Asn Pro Asp Leu Ser Ile Ala Gln Gln  
 115 120 125  
 Lys Lys Gln Ile Phe Leu Arg Asn Leu Glu Ser Asp Ile Ala Lys Ile  
 130 135 140  
 Gln Ile Phe Cys Ser Thr His Lys Ile Glu Ala Leu Val Leu Glu Val  
 145 150 155 160  
 Gln Ser Asp Ile Val Ser Gly Ser Lys Leu Ala Val His Lys Pro Val  
 165 170 175  
 Ala Ile Phe Gly Glu Glu Lys Gln Val Thr Glu Pro Glu Glu Lys Gln  
 180 185 190  
 Met Gln Glu Asp Pro Leu Thr Thr Glu Asn Ala Ser Ser Glu Ile Leu  
 195 200 205  
 Asp Ser His Val Arg Ala His Leu Arg Met Lys Ala Cys His Thr Leu  
 210 215 220  
 Pro Arg Tyr Ala Trp Gln Glu Thr Ser His Asp Phe Asp Glu Asp Asp  
 225 230 235 240  
 Ser Leu Pro Lys Lys Thr Glu Lys Gly Leu Phe Glu Asn Val Glu Pro  
 245 250 255  
 Gln Lys Lys His Ser Cys Ser Pro Lys His Ser Lys Leu His Lys His

260 265 270  
Cys His Gln Gln Phe Glu Tyr Arg Asp Gly Gln Ile Ile Ser His Ala  
275 280 285  
Ala Pro Gln Leu Val Leu Gly Val Gln Gly Pro Asn Leu Arg Ser Gly  
290 295 300  
Met Glu Val Val Leu Val Glu Lys Lys Ser Asp Gly Ser His Gln Arg  
305 310 315 320  
Trp Ile His Gln Glu Asp Ser Arg Thr Phe His Leu Val Ser Asn Pro  
325 330 335  
Asp Leu Val Leu Ala Val Ser Met Thr Lys Thr Arg Asn Glu Val Cys  
340 345 350  
Gly Tyr Pro Val Ile Val Gln Lys Tyr Lys Pro Tyr Asn Asn Gly Ala  
355 360 365  
Ala Asn Gln Arg Trp His Tyr Met Lys Asn Ile Lys Ala Leu Val Ala  
370 375 380  
Phe His Ser Thr Ala Leu Asp Lys Glu Ile Thr Ser Ala Asn Tyr Ala  
385 390 395 400  
Gly Val Cys Thr Ser Ser Val Ile Lys Glu Glu Asn Ile Asp Gln Pro  
405 410 415  
Gly Tyr Cys Tyr Leu Ser Pro Asp Gly Lys Arg Lys Thr Met Leu Cys  
420 425 430  
Leu Ala Cys Gly Gln Ser Met Arg Thr Glu Lys Gly Leu Lys Gln Leu  
435 440 445  
Leu Pro Gly Val Pro Phe Leu Cys Ile Ser Gly Thr Lys Thr Gln Lys  
450 455 460  
Pro Phe Leu Gln Gly Pro Phe Lys Val Ile Ser Val Ala Glu Val Asp  
465 470 475 480  
Leu Ser Cys Asp Lys Ala Glu Lys Thr Leu Ser Tyr Tyr Gln Ala Arg  
485 490 495

Leu Leu Ser Leu Arg Met Lys Thr Cys Thr Gln Ala Ala Ser His Ser  
500 505 510  
Gly Met Ala Ala Thr His Gln Lys Ala Val Lys Ile Ile Ala Tyr Lys  
515 520 525  
Asn Gly Asp Gly Tyr Arg Asn Gly Lys Leu Ile Val Ala Gly Thr Phe  
530 535 540  
Pro Met Leu Leu Thr Glu Cys Thr Glu Gln Leu Gly Leu Ala Arg Ala  
545 550 555 560  
Ala Ser Lys Val Tyr Thr Lys Asp Gly Thr Pro Ile Phe Thr Leu Arg  
565 570 575  
Asp Leu Val Leu Trp Ala Leu Asp Glu Ser Phe Leu Gln Arg Asp Ser  
580 585 590  
Glu Lys Gln Lys Gln Asp Ala Ala Pro Val Gly Lys Glu Gln Ile Ile  
595 600 605  
Val Glu Lys Asn Pro Arg Met Lys Val Lys Asn Arg Leu Phe Ala Lys  
610 615 620  
Ser Val Thr Ser Asp Ser Leu Asp Gly Ile Asp Lys Ser Leu Leu Thr  
625 630 635 640  
Leu Ile Leu Arg Asn Pro Ile Ala Ile Trp Val Ser Cys Gly Glu Pro  
645 650 655  
Phe Leu Pro Pro Asn Ala Leu Gln Ser Arg Lys Ile Arg Glu Thr Glu  
660 665 670  
Leu Ala Lys Lys Gly Gln Asn Phe Gly  
675 680

&lt;210&gt; 3269

&lt;211&gt; 133

&lt;212&gt; PRT



<213> Homo sapiens

<400> 3269

Met Thr Ile Lys Asp Leu Arg Ala His Ile Phe Ala Asn Ser Val Asp  
1 5 10 15  
Asn Ala Cys Val Val Leu Gln Ile Asp Asn Ala Arg Leu Ala Ala Asp  
20 25 30  
Asp Phe Arg Val Lys Tyr Lys Thr Glu Leu Ile Met Cys Leu Ser Val  
35 40 45  
Glu Ser Asn Val Arg Gly Leu His Lys Val Thr Asp Asp Thr Asn Val  
50 55 60  
Thr Arg Leu Gln Leu Glu Thr Glu Met Glu Ala Leu Lys Glu Glu Leu  
65 70 75 80  
Leu Phe Met Lys Lys Asn Gln Glu Lys Glu Val Lys Gly Leu Gln Ala  
85 90 95  
Leu Ile Ala Ser Ser Glu Leu Thr Met Glu Val Asn Ala Pro Lys Ser  
100 105 110  
Gln Asp Leu Ser Asn Ile Met Ala Asp Leu Pro Ala Gln Tyr Asp Glu  
115 120 125  
Leu Ala Gln Lys Asn  
130

<210> 3270

<211> 1111

<212> PRT

<213> Homo sapiens

<400> 3270

Met Ile Glu Ser Glu Asn Leu Asn Gln Glu Glu Ile Ile Lys Glu Leu  
 1 5 10 15  
 Cys Leu Cys Asn Gly Leu Ser Tyr Glu Met Val Gly Gln Glu Gly Ser  
 20 25 30  
 Asp Thr Ser Lys Leu Glu Met Phe Phe Leu Gly Tyr Pro Arg Ile Val  
 35 40 45  
 Gly Leu Ser Leu Phe Pro Asn Leu Thr Ser Leu Thr Ile Val Ala Gln  
 50 55 60  
 Asp Ile Lys Glu Ile Ser Gly Leu Glu Pro Cys Leu Gln Leu Lys Glu  
 65 70 75 80  
 Leu Trp Ile Ala Glu Cys Arg Ile Glu Lys Ile Glu Gly Leu Gln Glu  
 85 90 95  
 Cys Arg Asn Leu Glu Lys Leu Tyr Leu Tyr Phe Asn Lys Ile Ser Lys  
 100 105 110  
 Ile Glu Asn Leu Glu Lys Leu Ile Lys Leu Lys Val Leu Trp Leu Asn  
 115 120 125  
 His Asn Thr Ile Lys Asn Ile Glu Gly Leu Gln Thr Leu Lys Asn Leu  
 130 135 140  
 Lys Asp Leu Asn Leu Ala Gly Asn Leu Ile Asn Ser Ile Gly Arg Cys  
 145 150 155 160  
 Leu Asp Ser Asn Glu Gln Leu Glu Arg Leu Asn Leu Ser Gly Asn Gln  
 165 170 175  
 Ile Cys Ser Phe Lys Glu Leu Thr Asn Leu Thr Arg Leu Pro Cys Leu  
 180 185 190  
 Lys Asp Leu Cys Leu Asn Asp Pro Gln Tyr Thr Thr Asn Pro Val Cys  
 195 200 205  
 Leu Leu Cys Asn Tyr Ser Thr His Val Leu Tyr His Leu Pro Cys Leu  
 210 215 220  
 Gln Arg Phe Asp Thr Leu Asp Val Ser Ala Lys Gln Ile Lys Glu Leu

225                      230                      235                      240  
Ala Asp Thr Thr Ala Met Lys Lys Ile Met Tyr Tyr Asn Met Arg Ile  
                         245                      250                      255  
Lys Thr Leu Gln Arg His Leu Lys Glu Asp Leu Glu Lys Leu Asn Asp  
                         260                      265                      270  
Gln Lys Cys Lys Leu Gln Lys Leu Pro Glu Glu Arg Val Lys Leu Phe  
                         275                      280                      285  
Ser Phe Val Lys Lys Thr Leu Glu Arg Glu Leu Ala Glu Leu Lys Gly  
                         290                      295                      300  
Ser Gly Lys Gly His Ser Asp Gly Ser Asn Asn Ser Lys Val Thr Asp  
305                      310                      315                      320  
Pro Glu Thr Leu Lys Ser Cys Glu Thr Val Thr Glu Glu Pro Ser Leu  
                         325                      330                      335  
Gln Gln Lys Ile Leu Ala Lys Leu Asn Ala Leu Asn Glu Arg Val Thr  
                         340                      345                      350  
Phe Trp Asn Lys Lys Leu Asp Glu Ile Glu Ala Ile Tyr His Ile Glu  
                         355                      360                      365  
Val Lys Gln Lys Lys Lys Ser His Gly Leu Leu Ile Pro Leu Leu Leu  
                         370                      375                      380  
Ile Glu Leu Glu Thr Val Gly Asn Phe His Phe Glu Glu Gly Thr Arg  
385                      390                      395                      400  
Ser Asp Asp Trp Phe Asn Phe Cys Tyr Glu Leu Ile Leu Ser Arg Phe  
                         405                      410                      415  
Cys Ala Trp Asp Phe Arg Thr Tyr Gly Ile Thr Gly Val Lys Val Lys  
                         420                      425                      430  
Arg Ile Ile Lys Val Asn Asn Arg Ile Leu Arg Leu Lys Phe Glu Glu  
                         435                      440                      445  
Lys Phe Gln Lys Phe Leu Glu Asn Glu Asp Met His Asp Ser Glu Ser  
                         450                      455                      460

Tyr Arg Arg Met Leu Glu Cys Leu Phe Tyr Val Phe Asp Pro Glu Val  
465 470 475 480  
Ser Val Lys Lys Lys His Leu Leu Gln Ile Leu Glu Lys Gly Phe Lys  
485 490 495  
Asp Ser Glu Thr Ser Lys Leu Pro Leu Lys Lys Glu Ala Ile Ile Val  
500 505 510  
Ser Asn Ser Leu Ser Ile Ser Glu Cys Pro Arg Ile Glu Phe Leu Gln  
515 520 525  
Gln Lys His Lys Asp Glu Lys Lys Ile Ser Leu Lys His Glu Leu Phe  
530 535 540  
Arg His Gly Ile Leu Leu Ile Thr Lys Val Phe Leu Gly Gln Ser Val  
545 550 555 560  
Gln Ala His Glu Lys Glu Ser Ile Ser Gln Ser Asn Tyr Pro Met Val  
565 570 575  
Asn Ser Val Phe Ile Pro Arg Lys Tyr Leu Leu Asn Ser Val Met Gly  
580 585 590  
Gln Arg Asn Cys Asp Cys Ser Val Arg Gln Cys Lys Trp Phe Val Phe  
595 600 605  
Asp His Asp Leu Val Leu Pro Glu Tyr Val Val Glu Phe Glu Tyr Ile  
610 615 620  
Thr Met Val Lys Pro Pro Ser Leu Phe Ser Val Phe Asn Asn Val Ile  
625 630 635 640  
Leu Glu Glu Ser Lys Lys Asn Pro Glu Val Ser Val Phe Ser Lys Asp  
645 650 655  
Leu Lys Phe Asp Asp Glu Val Ile Lys Met Glu Pro Arg Ile Lys Ala  
660 665 670  
Arg Pro Lys Leu Ile Ser Leu Asp Asp Lys Thr Ile Leu Ser Leu Ala  
675 680 685  
Lys Thr Ser Val Tyr Ser His Ile Val Ser Leu Asn Leu His Gly Asn

690 695 700  
Ser Leu Ser Lys Leu Arg Asp Leu Ser Lys Leu Thr Gly Leu Arg Lys  
705 710 715 720  
Leu Asn Ile Ser Phe Asn Glu Phe Thr Cys Leu Asp Asp Val Tyr His  
725 730 735  
Leu Tyr Asn Leu Glu Tyr Leu Asp Ala Ser His Asn His Val Ile Thr  
740 745 750  
Leu Glu Gly Phe Arg Gly Leu Met Lys Leu Lys His Leu Asp Leu Ser  
755 760 765  
Trp Asn Gln Leu Lys Lys Ser Gly Asn Glu Ile Asn Met Leu Cys Lys  
770 775 780  
His Thr Thr Ser Leu Leu Thr Leu Asp Ile Gln His Asn Pro Trp Gln  
785 790 795 800  
Lys Pro Ala Thr Leu Arg Leu Ser Val Ile Gly Arg Leu Lys Thr Leu  
805 810 815  
Thr His Leu Asn Gly Val Phe Ile Ser Glu Glu Glu Ala Thr Ala Ala  
820 825 830  
Met Lys Phe Ile Ala Gly Thr Arg Ile Thr Gln Leu Ser Leu Leu Arg  
835 840 845  
His Ser Ser Thr Lys Glu Glu Arg Pro Arg Ile Leu Ser Ile Trp Pro  
850 855 860  
Ser Ala Lys Ile Leu Thr Gln Val Ser Lys Leu Gly Pro His Leu His  
865 870 875 880  
Leu Ser Gly Asn Cys Tyr Leu Lys Ile Thr Ala Leu Asn Leu Asp Gly  
885 890 895  
Gln His Leu Phe Glu Ile Thr Asn Leu Glu Lys Leu Glu Asn Leu Lys  
900 905 910  
Trp Ala Ser Phe Ser Asn Asn Asn Leu Thr Lys Met Glu Gly Leu Glu  
915 920 925

Ser Cys Ile Asn Leu Glu Glu Leu Thr Leu Asp Gly Asn Cys Ile Ser  
930 935 940  
Lys Ile Glu Gly Ile Ser Lys Met Thr Lys Leu Thr Arg Leu Ser Ile  
945 950 955 960  
Asn Asn Asn Leu Leu Thr Gly Trp Glu Glu His Thr Phe Asp Asn Met  
965 970 975  
Leu His Leu His Ser Leu Ser Leu Glu Asn Asn Arg Ile Thr Ser Leu  
980 985 990  
Ser Gly Leu Gln Lys Ser Phe Thr Leu Val Glu Leu Tyr Ile Ser Asn  
995 1000 1005  
Asn Tyr Ile Ala Val Asn Gln Glu Met His Asn Leu Lys Gly Leu Cys  
1010 1015 1020  
Asn Leu Val Ile Leu Asp Met Cys Gly Asn Ile Ile Ile Trp Asn Gln  
1025 1030 1035 1040  
Glu Asn Tyr Arg Leu Phe Val Ile Phe His Leu Pro Glu Leu Lys Ala  
1045 1050 1055  
Leu Asp Gly Ile Pro Ile Glu Pro Ser Glu Thr Asp Ser Ala Lys Asp  
1060 1065 1070  
Leu Phe Gly Gly Arg Leu Thr Ser Asp Met Ile Ala Glu Arg Gln Gly  
1075 1080 1085  
His Ser Asn Phe Lys Gln Met Gln Glu Leu Asn Trp Thr Ser Ser Ser  
1090 1095 1100  
Ile Ser Cys Ile Tyr Phe Val  
1105 1110

&lt;210&gt; 3271

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3271

Met	Ser	Thr	Arg	Lys	Arg	Arg	Gly	Gly	Ala	Ile	Asn	Ser	Arg	Gln	Ala
1				5					10					15	
Gln	Lys	Arg	Thr	Arg	Glu	Ala	Thr	Ser	Thr	Pro	Glu	Ile	Ser	Leu	Glu
			20					25					30		
Ala	Glu	Pro	Ile	Glu	Leu	Val	Glu	Thr	Ala	Gly	Asp	Glu	Ile	Val	Asp
			35					40					45		
Leu	Thr	Cys	Glu	Ser	Leu	Glu	Pro	Val	Val	Val	Asp	Leu	Thr	His	Asn
		50					55					60			
Asp	Ser	Val	Val	Ile	Val	Asp	Glu	Arg	Arg	Arg	Pro	Arg	Arg	Asn	Ala
65				70					75					80	
Arg	Arg	Leu	Pro	Gln	Asp	His	Ala	Asp	Ser	Cys	Val	Val	Ser	Ser	Asp
				85					90					95	
Asp	Glu	Glu	Leu	Ser	Arg	Asp	Arg	Asp	Val	Tyr	Val	Thr	Thr	His	Thr
			100						105					110	
Pro	Arg	Asn	Ala	Arg	Asp	Glu	Gly	Ala	Thr	Gly	Leu	Arg	Pro	Ser	Gly
			115						120					125	
Thr	Val	Ser	Cys	Pro	Ile	Cys	Met	Asp	Gly	Tyr	Ser	Glu	Ile	Val	Gln
			130						135					140	
Asn	Gly	Arg	Leu	Ile	Val	Ser	Thr	Glu	Cys	Gly	His	Val	Phe	Cys	Ser
145				150						155				160	
Gln	Cys	Leu	Arg	Asp	Ser	Leu	Lys	Asn	Ala	Asn	Thr	Cys	Pro	Thr	Cys
				165						170				175	
Arg	Lys	Lys	Ile	Asn	His	Lys	Arg	Tyr	His	Pro	Ile	Tyr	Ile		
			180							185				190	

&lt;210&gt; 3272

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3272

Met Val Pro Val Phe Ile Gly Cys Pro Pro Gly Lys Arg Leu Ala Phe

1 5 10 15

Asp Ile Thr Tyr Thr Leu Glu Tyr Ser Arg Leu Lys Asn Lys His Tyr

20 25 30

Phe Asp Cys Val Asn Val Asn Pro Glu Met Pro Cys Phe Leu Phe Arg

35 40 45

Asp Ser Val Cys Pro Val Pro Ser Pro Ala Gln Phe Thr Ala Leu Leu

50 55 60

Pro Pro Leu Leu Cys Ala Leu Pro Pro His Ser Ser Pro Arg Arg Leu

65 70 75 80

Pro Thr Leu Phe Pro Ala Ala Ser His Phe Pro Pro Ser Arg Ser Ser

85 90 95

Ala Ser Arg Ala Lys Leu Ile Ser Ser Ser Gly Leu Asn Pro Leu Gln

100 105 110

Pro His Ser Phe Leu Pro Leu Leu Leu Asp Ser Arg Phe Gly Asp Arg

115 120 125

Arg Leu Arg Gln Phe Pro Gly Gln Val Lys Ala Trp Pro Ala Cys Ser

130 135 140

&lt;210&gt; 3273

&lt;211&gt; 245

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 3273

Met Ala Leu Ala Leu Cys Leu Gln Val Leu Cys Ser Leu Cys Gly Trp  
1 5 10 15  
Leu Ser Leu Tyr Ile Ser Phe Cys His Leu Asn Lys His Arg Ser Tyr  
20 25 30  
Glu Trp Ser Cys Arg Leu Val Thr Phe Thr His Gly Val Leu Ser Ile  
35 40 45  
Gly Leu Ser Ala Tyr Ile Gly Phe Ile Asp Gly Pro Trp Pro Phe Thr  
50 55 60  
His Pro Gly Ser Pro Asn Thr Pro Leu Gln Val His Val Leu Cys Leu  
65 70 75 80  
Thr Leu Gly Tyr Phe Ile Phe Asp Leu Gly Trp Cys Val Tyr Phe Gln  
85 90 95  
Ser Glu Gly Ala Leu Ile Leu Ala His His Thr Leu Ser Ile Leu Gly  
100 105 110  
Ile Ile Met Ala Leu Val Leu Gly Glu Ser Gly Thr Glu Val Asn Ala  
115 120 125  
Val Leu Phe Gly Ser Glu Leu Thr Asn Pro Leu Leu Gln Met Arg Trp  
130 135 140  
Phe Leu Arg Glu Thr Gly His Tyr His Ser Phe Thr Gly Asp Val Val  
145 150 155 160  
Asp Phe Leu Phe Val Ala Leu Phe Thr Gly Val Arg Ile Gly Val Gly  
165 170 175  
Ala Cys Leu Leu Phe Cys Glu Met Val Ser Pro Thr Pro Lys Trp Phe  
180 185 190  
Val Lys Ala Gly Gly Val Ala Met Tyr Ala Val Ser Trp Cys Phe Met  
195 200 205

Phe Ser Ile Trp Arg Phe Ala Trp Arg Lys Ser Ile Lys Lys Tyr His  
 210 215 220  
 Ala Trp Arg Ser Arg Arg Ser Glu Glu Arg Gln Leu Lys His Asn Gly  
 225 230 235 240  
 His Leu Lys Ile His  
 245

<210> 3274

<211> 706

<212> PRT

<213> Homo sapiens

<400> 3274

Met Arg Val Leu Ser Gly Gln Arg Gln Gln Gln Pro Ala Asp Lys Lys  
 1 5 10 15  
 Arg Arg Arg Val Leu Cys Ala Gly Cys Arg Ala Thr Leu Arg Ala Ala  
 20 25 30  
 Val Arg Ala Ser Val Ser Glu Cys Cys Val Pro Gly Glu Ala Gln Gly  
 35 40 45  
 Gly Pro Ala Gly Ile Arg Val Arg Val Leu Cys Ala Gly Arg Cys Ser  
 50 55 60  
 Gly Arg Pro Cys Gly His Pro Cys Gln Ser Ala Val Cys Arg Ala Glu  
 65 70 75 80  
 Leu Arg Ala Ala Leu Arg Ala Ser Met Ser Glu Cys Cys Val Pro Gly  
 85 90 95  
 Asp Ala Gln Gly Gly Arg Ala Gly Ile His Val Arg Val Leu Cys Ala  
 100 105 110  
 Gly Arg Gln Ser Gly Gln Pro Cys Gly His Pro Cys Gln Ser Ala Val

115	120	125
Cys Arg Ala Thr Leu Arg Ala Ala Val Arg Ala Ser Met Ser Glu Cys		
130	135	140
Cys Val Pro Gly Gly Ala Gln Gly Gly Pro Ala Gly Ile Cys Val Arg		
145	150	155
Val Leu Cys Ala Gly Arg Ser Ser Gly Arg Pro Cys Gly His Pro Cys		
165	170	175
Gln Ser Ala Val Cys Arg Ala Glu Leu Arg Ala Ala Leu Arg Ala Ser		
180	185	190
Val Ser Glu Cys Cys Val Pro Gly Asp Ala Gln Gly Gly Arg Ala Gly		
195	200	205
Ile His Val Arg Val Leu Cys Ala Gly Arg Arg Ser Gly Arg Pro Cys		
210	215	220
Gly His Leu Cys Gln Ser Ala Val Cys Arg Thr Lys Leu Arg Ala Ala		
225	230	235
Leu Arg Ala Ser Val Ser Glu Cys Cys Val Pro Gly Asp Ala Gln Gly		
245	250	255
Gly Cys Ala Gly Ile Cys Val Arg Val Leu Cys Ala Gly Arg Arg Ser		
260	265	270
Gly Arg Pro Cys Gly His Pro Cys Gln Ser Ala Val Cys Arg Ala Met		
275	280	285
Leu Arg Ala Ala Leu Arg Ala Ser Met Ser Glu Cys Cys Val Pro Gly		
290	295	300
Asp Ala Gln Gly Gly Pro Ala Gly Ile His Val Arg Val Leu Cys Ala		
305	310	315
Arg Arg Cys Ser Gly Arg Pro Cys Gly His Pro Cys Gln Ser Ala Val		
325	330	335
Cys Arg Ala Glu Leu Arg Ala Ala Val Trp Ala Ser Val Leu Ala Phe		
340	345	350

Cys Val Pro Gly Asp Ala Gln Gly Gly Pro Ala Gly Ile Cys Val Arg  
355 360 365  
Val Leu Cys Ala Gly Arg Cys Ser Gly Gln Pro Cys Arg His Pro Cys  
370 375 380  
Gln Ser Ala Val Cys Arg Ala Thr Val Arg Ala Ala Val Arg Ala Ser  
385 390 395 400  
Val Ser Glu Cys Cys Val Pro Gly Asp Ala Gln Gly Ser Arg Ala Gly  
405 410 415  
Ile His Val Arg Val Leu Cys Ala Gly Arg Gln Ser Gly Gln Pro Cys  
420 425 430  
Gly His Pro Cys Gln Ser Ala Val Cys Arg Ala Met Leu Arg Ala Ala  
435 440 445  
Val Gln Ala Ser Met Ser Glu Cys Cys Val Pro Gly Asp Ser Gln Gly  
450 455 460  
Ser Arg Ala Gly Ile Arg Val Arg Val Leu Cys Ala Gly Arg Arg Ser  
465 470 475 480  
Gly Gln Pro Cys Gly His Pro Cys Gln Ser Ala Val Cys Arg Ala Thr  
485 490 495  
Leu Arg Ala Ala Val Arg Ala Ser Met Ser Glu Cys Cys Val Pro Gly  
500 505 510  
Asp Ala Gln Gly Gly Arg Ala Gly Ile His Val Arg Val Leu Cys Ala  
515 520 525  
Gly Arg Gln Ser Gly Gln Pro Cys Gly His Pro Cys Gln Ser Ala Val  
530 535 540  
Cys Arg Ala Met Leu Arg Ala Ala Val Arg Ala Ser Val Ser Glu Cys  
545 550 555 560  
Cys Val Pro Gly Asp Ala Gln Gly Gly Arg Leu Gly Ile Arg Val Arg  
565 570 575  
Val Leu Cys Ala Gly Arg Leu Ser Gly Arg Pro Cys Gly His Pro Cys

580                                      585                                      590  
 Gln Arg Ser Val Cys Arg Ala Thr Leu Arg Ala Ala Val Arg Ala Ser  
 595                                      600                                      605  
 Val Ser Glu Cys Cys Val Pro Gly Asp Ser Gln Gly Ser Arg Ala Gly  
 610                                      615                                      620  
 Ile Arg Val Arg Val Leu Cys Ala Gly Arg Leu Ser Gly Arg Pro Cys  
 625                                      630                                      635                                      640  
 Gly His Pro Cys Gln Ser Ala Val Cys Arg Ala Thr Leu Arg Ala Ala  
 645                                      650                                      655  
 Val Trp Ala Ser Val Ser Glu Cys Cys Val Pro Gly Asp Ala Gln Gly  
 660                                      665                                      670  
 Gly Cys Val Ser Ile Arg Val Arg Trp Ala Ala Gly Cys Trp Gly Val  
 675                                      680                                      685  
 Thr Asp Ser Pro Leu Gly Leu Arg Ala Gly Gly Leu Leu Ala Ser Thr  
 690                                      695                                      700  
 Trp Val  
 705

<210> 3275

<211> 170

<212> PRT

<213> Homo sapiens

<400> 3275

Met Arg Gly Gln Thr Glu Glu Val Val Ala Ala Arg Arg Ser Gly Pro  
 1                                      5                                      10                                      15  
 Gly Cys Ala Arg Trp Arg Leu Glu Gly Gly Ser Pro Lys Ser Pro Cys  
 20                                      25                                      30

Cys His Phe Arg Arg Pro Thr Gln Val Ser Leu Leu Ser Phe Gln Glu  
                   35                                  40                                  45  
 Ala Glu Phe Phe Pro Asn Pro Arg Glu Gly Val Arg Gly Leu Val Ser  
                   50                                  55                                  60  
 Ser Leu Val Asp Gly Phe Leu Gly Gly Leu Gly Gln Leu Val His Gly  
                   65                                  70                                  75                                  80  
 Trp Gly Arg Ala Gly Glu Arg Ala Gly Gln Ala Gly Pro Gly Asn His  
                                   85                                  90                                  95  
 Ser Ala Cys Arg Leu Ser Leu Ala Trp Val Ser Arg Gly Thr Cys Leu  
                                   100                                  105                                  110  
 Gly His Cys Gly Gln Arg Ala Leu Gln Arg Arg Gly Cys Ala Trp Ala  
                                   115                                  120                                  125  
 Pro Ala Gly Met Gly Arg Gly Val Gly Gly Val Leu Gly Leu Pro Ala  
                                   130                                  135                                  140  
 Ser Leu Gln Pro His Gln Thr Phe Leu Pro Arg Leu Cys Gly Leu Val  
                   145                                  150                                  155                                  160  
 His His Leu Leu Ser Cys Arg Ser Gly Arg  
                                   165                                  170

&lt;210&gt; 3276

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3276

Met Lys His Gln Thr Gln Cys Arg Arg Gly Gly Arg Glu Glu Met Lys  
                   1                                  5                                  10                                  15  
 His Gln Thr Gln Cys Arg Arg Gly Pro Trp Glu Glu Met Lys His Gln

20	25	30
Thr Gln Cys Arg Arg Gly Gly Arg Glu Asp Leu Lys His Gln Thr Gln		
35	40	45
Cys Arg Arg Gly Gly Arg Glu Asp Leu Lys His Gln Thr Gln Cys Arg		
50	55	60
Arg Gly Gly Arg Glu Glu Met Lys His Gln Thr Gln Cys Arg Arg Gly		
65	70	75
Gly Arg Glu Glu Met Lys His Gln Thr Gln Cys Arg Arg Gly Gly Arg		
85	90	95
Glu Asp Leu Lys His Gln Thr Gln Cys Arg Arg Gly Gly Arg Glu Glu		
100	105	110
Met Lys Asp Gln Thr Gln Cys Arg Arg Gly Gly Trp Glu Glu Met Lys		
115	120	125
His Gln Leu Cys Glu Ile Ser Gly Phe Gly Glu Lys Pro Leu Val Ser		
130	135	140
Gly		
145		

&lt;210&gt; 3277

&lt;211&gt; 741

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3277

Met Pro Tyr Arg Arg Val Thr Ser Gly Arg Leu Leu Ser Leu Ala Ala		
1	5	10
Pro Lys Met Ala Ser Ile Met Glu Gly Pro Leu Ser Lys Trp Thr Asn		
20	25	30

Val Met Lys Gly Trp Gln Tyr Arg Trp Phe Val Leu Asp Tyr Asn Ala  
 35 40 45  
 Gly Leu Leu Ser Tyr Tyr Thr Ser Lys Asp Lys Met Met Arg Gly Ser  
 50 55 60  
 Arg Arg Gly Cys Val Arg Leu Arg Gly Ala Val Ile Gly Ile Asp Asp  
 65 70 75 80  
 Glu Asp Asp Ser Thr Phe Thr Ile Thr Val Asp Gln Lys Thr Phe His  
 85 90 95  
 Phe Gln Ala Arg Asp Ala Asp Glu Arg Glu Lys Trp Ile His Ala Leu  
 100 105 110  
 Glu Glu Thr Ile Leu Arg His Thr Leu Gln Leu Gln Gly Leu Asp Ser  
 115 120 125  
 Gly Phe Val Pro Ser Val Gln Asp Phe Asp Lys Lys Leu Thr Glu Ala  
 130 135 140  
 Asp Ala Tyr Leu Gln Ile Leu Ile Glu Gln Leu Lys Leu Phe Asp Asp  
 145 150 155 160  
 Lys Leu Gln Asn Cys Lys Glu Asp Glu Gln Arg Lys Lys Ile Glu Thr  
 165 170 175  
 Leu Lys Glu Thr Thr Asn Ser Met Val Glu Ser Ile Lys His Cys Ile  
 180 185 190  
 Val Leu Leu Gln Ile Ala Lys Ser Thr Ile Asn Pro Val Asp Ala Ile  
 195 200 205  
 Tyr Gln Pro Ser Pro Leu Glu Pro Val Ile Ser Thr Met Pro Ser Gln  
 210 215 220  
 Thr Val Leu Pro Pro Glu Pro Val Gln Leu Cys Lys Ser Glu Gln Arg  
 225 230 235 240  
 Pro Ser Ser Leu Pro Val Gly Pro Val Leu Ala Thr Leu Gly His His  
 245 250 255  
 Gln Thr Pro Thr Pro Asn Ser Thr Gly Ser Gly His Ser Pro Pro Ser



260 265 270  
Ser Ser Leu Thr Ser Pro Ser His Val Asn Leu Ser Pro Asn Thr Val  
275 280 285  
Pro Glu Phe Ser Tyr Ser Ser Ser Glu Asp Glu Phe Tyr Asp Ala Asp  
290 295 300  
Glu Phe His Gln Ser Gly Ser Ser Pro Lys Arg Leu Ile Asp Ser Ser  
305 310 315 320  
Gly Ser Ala Ser Val Leu Thr His Ser Ser Ser Gly Asn Ser Leu Lys  
325 330 335  
Arg Pro Asp Thr Thr Glu Ser Leu Asn Ser Ser Leu Ser Asn Gly Thr  
340 345 350  
Ser Asp Ala Asp Leu Phe Asp Ser His Asp Asp Arg Asp Asp Asp Ala  
355 360 365  
Glu Ala Gly Ser Val Glu Glu His Lys Ser Val Ile Met His Leu Leu  
370 375 380  
Ser Gln Val Arg Leu Gly Met Asp Leu Thr Lys Val Val Leu Pro Thr  
385 390 395 400  
Phe Ile Leu Glu Arg Arg Ser Leu Leu Glu Met Tyr Ala Asp Phe Phe  
405 410 415  
Ala His Pro Asp Leu Phe Val Ser Ile Ser Asp Gln Lys Asp Pro Lys  
420 425 430  
Asp Arg Met Val Gln Val Val Lys Trp Tyr Leu Ser Ala Phe His Ala  
435 440 445  
Gly Arg Lys Gly Ser Val Ala Lys Lys Pro Tyr Asn Pro Ile Leu Gly  
450 455 460  
Glu Ile Phe Gln Cys His Trp Thr Leu Pro Asn Asp Thr Glu Glu Asn  
465 470 475 480  
Thr Glu Leu Val Ser Glu Gly Pro Val Pro Trp Val Ser Lys Asn Ser  
485 490 495

Val Thr Phe Val Ala Glu Gln Val Ser His His Pro Pro Ile Ser Ala			
500	505	510	
Phe Tyr Ala Glu Cys Phe Asn Lys Lys Ile Gln Phe Asn Ala His Ile			
515	520	525	
Trp Thr Lys Ser Lys Phe Leu Gly Met Ser Ile Gly Val His Asn Ile			
530	535	540	
Gly Gln Gly Cys Val Ser Cys Leu Asp Tyr Asp Glu His Tyr Ile Leu			
545	550	555	560
Thr Phe Pro Asn Gly Tyr Gly Arg Ser Ile Leu Thr Val Pro Trp Val			
565	570	575	
Glu Leu Gly Gly Glu Cys Asn Ile Asn Cys Ser Lys Thr Gly Tyr Ser			
580	585	590	
Ala Asn Ile Ile Phe His Thr Lys Pro Phe Tyr Gly Gly Lys Lys His			
595	600	605	
Arg Ile Thr Ala Glu Ile Phe Ser Pro Asn Asp Lys Lys Ser Phe Cys			
610	615	620	
Ser Ile Glu Gly Glu Trp Asn Gly Val Met Tyr Ala Lys Tyr Ala Thr			
625	630	635	640
Gly Glu Asn Thr Val Phe Val Asp Thr Lys Lys Leu Pro Ile Ile Lys			
645	650	655	
Lys Lys Val Arg Lys Leu Glu Asp Gln Asn Glu Tyr Glu Ser Arg Ser			
660	665	670	
Leu Trp Lys Asp Val Thr Phe Asn Leu Lys Ile Arg Asp Ile Asp Ala			
675	680	685	
Ala Thr Glu Ala Lys His Arg Leu Glu Glu Arg Gln Arg Ala Glu Ala			
690	695	700	
Arg Glu Arg Lys Glu Lys Glu Ile Gln Trp Glu Thr Arg Leu Phe His			
705	710	715	720
Glu Asp Gly Glu Cys Trp Val Tyr Asp Glu Pro Leu Leu Lys Arg Leu			

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Leu Cys Asn Leu Arg Asn Leu Pro Pro Gln Ala Leu Ile Glu His His  
145 150 155 160  
Glu Glu Ala Glu Glu Met Gly Gly Tyr Phe Ile Ile Asn Gly Ile Glu  
165 170 175  
Lys Val Ile Arg Met Leu Ile Met Pro Arg Arg Asn Phe Pro Ile Ala  
180 185 190  
Met Ile Arg Pro Lys Trp Lys Thr Arg Gly Pro Gly Tyr Thr Gln Tyr  
195 200 205  
Gly Val Ser Met His Cys Val Arg Glu Glu His Ser Ala Val Asn Met  
210 215 220  
Asn Leu His Tyr Leu Glu Asn Gly Thr Val Met Leu Asn Phe Ile Tyr  
225 230 235 240  
Arg Lys Glu Leu Phe Phe Leu Pro Leu Gly Phe Ala Leu Lys Ala Leu  
245 250 255  
Val Ser Phe Ser Asp Tyr Gln Ile Phe Gln Glu Leu Ile Lys Gly Lys  
260 265 270  
Glu Asp Asp Ser Phe Leu Arg Asn Ser Val Ser Gln Met Leu Arg Ile  
275 280 285  
Val Met Glu Glu Gly Cys Ser Thr Gln Lys Gln Val Leu Asn Tyr Leu  
290 295 300  
Gly Glu Cys Phe Arg Val Lys Leu Asn Val Pro Asp Trp Tyr Pro Asn  
305 310 315 320  
Glu Gln Ala Ala Glu Phe Leu Phe Asn Gln Cys Ile Cys Ile His Leu  
325 330 335  
Lys Ser Asn Thr Glu Lys Phe Tyr Met Leu Cys Leu Met Thr Arg Lys  
340 345 350  
Leu Phe Ala Leu Ala Lys Gly Glu Cys Met Glu Asp Asn Pro Asp Ser  
355 360 365  
Leu Val Asn Gln Glu Val Leu Thr Pro Gly Gln Leu Phe Leu Met Phe

370 375 380  
Leu Lys Glu Lys Leu Glu Gly Trp Leu Val Ser Ile Lys Ile Ala Phe  
385 390 395 400  
Asp Lys Lys Ala Gln Lys Thr Ser Val Ser Met Asn Thr Asp Asn Leu  
405 410 415  
Met Arg Ile Phe Thr Met Gly Ile Asp Leu Thr Lys Pro Phe Glu Tyr  
420 425 430  
Leu Phe Ala Thr Gly Asn Leu Arg Ser Lys Thr Gly Leu Gly Leu Leu  
435 440 445  
Gln Asp Ser Gly Leu Cys Val Val Ala Asp Lys Leu Asn Phe Ile Arg  
450 455 460  
Tyr Leu Ser His Phe Arg Cys Val His Arg Gly Ala Asp Phe Ala Lys  
465 470 475 480  
Met Arg Thr Thr Thr Val Arg Arg Leu Leu Pro Glu Ser Trp Gly Phe  
485 490 495  
Leu Cys Pro Val His Thr Pro Asp Gly Glu Pro Cys Gly Leu Met Asn  
500 505 510  
His Leu Thr Ala Val Cys Glu Val Val Thr Gln Phe Val Tyr Thr Ala  
515 520 525  
Ser Ile Pro Ala Leu Leu Cys Asn Leu Gly Val Thr Pro Ile Asp Gly  
530 535 540  
Ala Pro His Arg Ser Tyr Ser Glu Cys Tyr Pro Val Leu Leu Asp Gly  
545 550 555 560  
Val Met Val Gly Trp Val Asp Lys Asp Leu Ala Pro Gly Ile Ala Asp  
565 570 575  
Ser Leu Arg His Phe Lys Val Leu Arg Glu Lys Arg Ile Pro Pro Trp  
580 585 590  
Met Glu Val Val Leu Ile Pro Met Thr Gly Lys Pro Ser Leu Tyr Pro  
595 600 605

Gly Leu Phe Leu Phe Thr Thr Pro Cys Arg Leu Val Arg Pro Val Gln  
610 615 620  
Asn Leu Ala Leu Gly Lys Glu Glu Leu Ile Gly Thr Met Glu Gln Ile  
625 630 635 640  
Phe Met Asn Val Ala Ile Phe Glu Asp Glu Val Phe Ala Gly Val Thr  
645 650 655  
Thr His Gln Glu Leu Phe Pro His Ser Leu Leu Ser Val Ile Ala Asn  
660 665 670  
Phe Ile Pro Phe Ser Asp His Asn Gln Ser Pro Arg Asn Met Tyr Gln  
675 680 685  
Cys Gln Met Gly Lys Gln Thr Met Gly Phe Pro Leu Leu Thr Tyr Gln  
690 695 700  
Asp Arg Ser Asp Asn Lys Leu Tyr Arg Leu Gln Thr Pro Gln Ser Pro  
705 710 715 720  
Leu Val Arg Pro Ser Met Tyr Asp Tyr Tyr Asp Met Asp Asn Tyr Pro  
725 730 735  
Ile Gly Thr Asn Ala Ile Val Ala Val Ile Ser Tyr Thr Gly Tyr Asp  
740 745 750  
Met Glu Asp Ala Met Ile Val Asn Lys Ala Ser Trp Glu Arg Gly Phe  
755 760 765  
Ala His Gly Ser Val Tyr Lys Ser Glu Phe Ile Asp Leu Ser Glu Lys  
770 775 780  
Ile Lys Gln Gly Asp Ser Ser Leu Val Phe Gly Ile Lys Pro Gly Gly  
785 790 795 800  
Pro Arg Val Leu Gln Lys Leu Asp Asp Asp Gly Leu Pro Phe Ile Gly  
805 810 815  
Ala Lys Leu Gln Tyr Gly Asp Pro Tyr Tyr Ser Tyr Leu Asn Leu Asn  
820 825 830  
Thr Gly Glu Ser Phe Val Met Tyr Tyr Lys Ser Lys Glu Asn Cys Val

835	840	845
Val Asp Asn Ile Lys Val Cys Ser Asn Asp Thr Gly Ser Gly Lys Phe		
850	855	860
Lys Cys Val Cys Ile Thr Met Arg Val Pro Arg Asn Pro Thr Ile Gly		
865	870	875
880		
Asp Lys Phe Ala Ser Arg Arg Gly Gln Lys Gly Ile Leu Ser Arg Leu		
885	890	895
Trp Pro Ala Glu Asp Met Pro Phe Thr Glu Ser Gly Met Val Pro Asp		
900	905	910
Ile Leu Phe Asn Pro His Gly Phe Pro Ser Arg Met Thr Ile Gly Met		
915	920	925
Leu Ile Glu Ser Met Ala Gly Lys Ser Ala Ala Leu His Gly Leu Cys		
930	935	940
His Asp Ala Thr Pro Phe Ile Phe Ser Glu Glu Asn Ser Ala Leu Glu		
945	950	955
960		
Tyr Phe Gly Glu Met Leu Lys Ala Ala Gly Tyr Asn Phe Tyr Gly Thr		
965	970	975
Glu Arg Leu Tyr Ser Gly Ile Ser Gly Leu Glu Leu Glu Ala Asp Ile		
980	985	990
Phe Ile Gly Val Val Tyr Tyr Gln Arg Leu Arg His Met Val Ser Asp		
995	1000	1005
Lys Phe Gln Val Arg Thr Thr Gly Ala Arg Asp Arg Val Thr Asn Gln		
1010	1015	1020
Pro Ile Gly Gly Arg Asn Val Gln Gly Gly Ile Arg Phe Gly Glu Met		
1025	1030	1035
1040		
Glu Arg Asp Ala Leu Leu Ala His Gly Thr Ser Phe Leu Leu His Asp		
1045	1050	1055
Arg Leu Phe Asn Cys Ser Asp Arg Ser Val Ala His Val Cys Val Lys		
1060	1065	1070

Cys Gly Ser Leu Leu Ser Pro Leu Leu Glu Lys Pro Pro Pro Ser Trp  
 1075 1080 1085  
 Ser Ala Met Arg Asn Arg Lys Tyr Asn Cys Thr Leu Cys Ser Arg Ser  
 1090 1095 1100  
 Asp Thr Ile Asp Thr Val Ser Val Pro Tyr Val Phe Arg Tyr Phe Val  
 1105 1110 1115 1120  
 Ala Glu Leu Ala Ala Met Asn Ile Lys Val Lys Leu Asp Val Val  
 1125 1130 1135

<210> 3279

<211> 1281

<212> PRT

<213> Homo sapiens

<400> 3279

Met Ser Ser Ser Arg Ala Gln Gln Met His Ala Phe Ser Trp Ile Arg  
 1 5 10 15  
 Asn Thr Leu Glu Glu His Pro Glu Thr Ser Leu Pro Lys Gln Glu Val  
 20 25 30  
 Tyr Asp Glu Tyr Lys Ser Tyr Cys Asp Asn Leu Gly Tyr His Pro Leu  
 35 40 45  
 Ser Ala Ala Asp Phe Gly Lys Ile Met Lys Asn Val Phe Pro Asn Met  
 50 55 60  
 Lys Ala Arg Arg Leu Gly Thr Arg Gly Lys Ser Lys Tyr Cys Tyr Ser  
 65 70 75 80  
 Gly Leu Arg Lys Lys Ala Phe Val His Met Pro Thr Leu Pro Asn Leu  
 85 90 95  
 Asp Phe His Lys Thr Gly Asp Gly Leu Glu Gly Ala Glu Pro Ser Gly



100 105 110  
Gln Leu Gln Asn Ile Asp Glu Glu Val Ile Ser Ser Ala Cys Arg Leu  
115 120 125  
Val Cys Glu Trp Ala Gln Lys Val Leu Ser Gln Pro Phe Asp Thr Val  
130 135 140  
Leu Glu Leu Ala Arg Phe Leu Val Lys Ser His Tyr Ile Gly Thr Lys  
145 150 155 160  
Ser Met Ala Ala Leu Thr Val Met Ala Ala Ala Pro Ala Gly Met Lys  
165 170 175  
Gly Ile Thr Gln Pro Ser Ala Phe Ile Pro Thr Ala Glu Ser Asn Ser  
180 185 190  
Phe Gln Pro Gln Val Lys Thr Leu Pro Ser Pro Ile Asp Ala Lys Gln  
195 200 205  
Gln Leu Gln Arg Lys Ile Gln Lys Lys Gln Gln Glu Gln Lys Leu Gln  
210 215 220  
Ser Pro Leu Pro Gly Glu Ser Ala Ala Lys Lys Ser Glu Ser Ala Thr  
225 230 235 240  
Ser Asn Gly Val Thr Asn Leu Pro Asn Gly Asn Pro Ser Ile Leu Ser  
245 250 255  
Pro Gln Pro Ile Gly Ile Val Val Ala Ala Val Pro Ser Pro Ile Pro  
260 265 270  
Val Gln Arg Thr Arg Gln Leu Val Thr Ser Pro Ser Pro Met Ser Ser  
275 280 285  
Ser Asp Gly Lys Val Leu Pro Leu Asn Val Gln Val Val Thr Gln His  
290 295 300  
Met Gln Ser Val Lys Gln Ala Pro Lys Thr Pro Gln Asn Val Pro Ala  
305 310 315 320  
Ser Pro Gly Gly Asp Arg Ser Ala Arg His Arg Tyr Pro Gln Ile Leu  
325 330 335

Pro Lys Pro Ala Asn Thr Ser Ala Leu Thr Ile Arg Ser Pro Thr Thr  
340 345 350  
Val Leu Phe Thr Ser Ser Pro Ile Lys Thr Ala Val Val Pro Ala Ser  
355 360 365  
His Met Ser Ser Leu Asn Val Val Lys Met Thr Thr Ile Ser Leu Thr  
370 375 380  
Pro Ser Asn Ser Asn Thr Pro Leu Lys His Ser Ala Ser Val Ser Ser  
385 390 395 400  
Ala Thr Gly Thr Thr Glu Glu Ser Arg Ser Val Pro Gln Ile Lys Asn  
405 410 415  
Gly Ser Val Val Ser Leu Gln Ser Pro Gly Ser Arg Ser Ser Ser Ala  
420 425 430  
Gly Gly Thr Ser Ala Val Glu Val Lys Val Glu Pro Glu Thr Ser Ser  
435 440 445  
Asp Glu His Pro Val Gln Cys Gln Glu Asn Ser Asp Glu Ala Lys Ala  
450 455 460  
Pro Gln Thr Pro Ser Ala Leu Leu Gly Gln Lys Ser Asn Thr Asp Gly  
465 470 475 480  
Ala Leu Gln Lys Pro Ser Asn Glu Gly Val Ile Glu Ile Lys Ala Thr  
485 490 495  
Lys Val Cys Asp Gln Arg Thr Lys Cys Lys Ser Arg Cys Asn Glu Met  
500 505 510  
Leu Pro Gly Thr Ser Thr Gly Asn Asn Gln Ser Thr Ile Thr Leu Ser  
515 520 525  
Val Ala Ser Gln Asn Leu Thr Phe Thr Ser Ser Ser Ser Pro Pro Asn  
530 535 540  
Gly Asp Ser Ile Asn Lys Asp Pro Lys Leu Cys Thr Lys Ser Pro Arg  
545 550 555 560  
Lys Arg Leu Ser Ser Thr Leu Gln Glu Thr Gln Val Pro Pro Val Lys

565	570	575
Lys Pro Ile Val Glu Gln Leu Ser Ala Ala Thr Ile Glu Gly Gln Lys		
580	585	590
Gln Gly Ser Val Lys Lys Asp Gln Lys Val Pro His Ser Gly Lys Thr		
595	600	605
Glu Gly Ser Thr Ala Gly Ala Gln Ile Pro Ser Lys Val Ser Val Asn		
610	615	620
Val Ser Ser His Ile Gly Ala Asn Gln Pro Leu Asn Ser Ser Ala Leu		
625	630	635
640		
Val Ile Ser Asp Ser Ala Leu Glu Gln Gln Thr Thr Pro Ser Ser Ser		
645	650	655
Pro Asp Ile Lys Val Lys Leu Glu Gly Ser Val Phe Leu Leu Asp Ser		
660	665	670
Asp Ser Lys Ser Val Gly Ser Phe Asn Pro Asn Gly Trp Gln Gln Ile		
675	680	685
Thr Lys Asp Ser Glu Phe Ile Ser Ala Ser Cys Glu Gln Gln Gln Asp		
690	695	700
Ile Ser Val Met Thr Ile Pro Glu His Ser Asp Ile Asn Asp Leu Glu		
705	710	715
720		
Lys Ser Val Trp Glu Leu Glu Gly Met Pro Gln Asp Thr Tyr Ser Gln		
725	730	735
Gln Leu Arg Ser Gln Ile Gln Glu Ser Ser Leu Asn Gln Ile Gln Ala		
740	745	750
His Ser Ser Asp Gln Leu Pro Leu Gln Ser Glu Leu Lys Glu Phe Glu		
755	760	765
Pro Ser Val Ser Gln Thr Asn Glu Ser Tyr Phe Pro Phe Asp Asp Glu		
770	775	780
Leu Thr Gln Asp Ser Ile Val Glu Glu Leu Val Leu Met Glu Gln Gln		
785	790	795
800		

Met Ser Met Asn Asn Ser His Ser Tyr Gly Asn Cys Leu Gly Met Thr  
                             805                            810                            815  
 Leu Gln Ser Gln Ser Val Thr Pro Gly Ala Pro Met Ser Ser His Thr  
                             820                            825                            830  
 Ser Ser Thr His Phe Tyr His Pro Ile His Ser Asn Gly Thr Pro Ile  
                             835                            840                            845  
 His Thr Pro Thr Pro Thr Pro Thr Pro Thr Pro Thr Pro Thr Pro Thr  
                             850                            855                            860  
 Pro Thr Pro Thr Ser Glu Met Ile Ala Gly Ser Gln Ser Leu Ser Arg  
 865                            870                            875                            880  
 Glu Ser Pro Cys Ser Arg Leu Ala Gln Thr Thr Pro Val Asp Ser Ala  
                             885                            890                            895  
 Leu Gly Ser Ser Arg His Thr Pro Ile Gly Thr Pro His Ser Asn Cys  
                             900                            905                            910  
 Ser Ser Ser Val Pro Pro Ser Pro Val Glu Cys Arg Asn Pro Phe Ala  
                             915                            920                            925  
 Phe Thr Pro Ile Ser Ser Ser Met Ala Tyr His Asp Ala Ser Ile Val  
                             930                            935                            940  
 Ser Ser Ser Pro Val Lys Pro Met Gln Arg Pro Met Ala Thr His Pro  
 945                            950                            955                            960  
 Asp Lys Thr Lys Leu Glu Trp Met Asn Asn Gly Tyr Ser Gly Val Gly  
                             965                            970                            975  
 Asn Ser Ser Val Ser Gly His Gly Ile Leu Pro Ser Tyr Gln Glu Leu  
                             980                            985                            990  
 Val Glu Asp Arg Phe Arg Lys Pro His Ala Phe Ala Val Pro Gly Gln  
                             995                            1000                            1005  
 Ser Tyr Gln Ser Gln Ser Arg His His Asp Thr His Phe Gly Arg Leu  
                             1010                            1015                            1020  
 Thr Pro Val Ser Pro Val Gln His Gln Gly Ala Thr Val Asn Asn Thr

1025                      1030                      1035                      1040  
Asn Lys Gln Glu Gly Phe Ala Val Pro Ala Pro Leu Asp Asn Lys Gly  
                         1045                      1050                      1055  
Thr Asn Ser Ser Ala Ser Ser Asn Phe Arg Cys Arg Ser Val Ser Pro  
                         1060                      1065                      1070  
Ala Val His Arg Gln Arg Asn Leu Ser Gly Ser Thr Leu Tyr Pro Val  
                         1075                      1080                      1085  
Ser Asn Ile Pro Gln Ser Asn Val Thr Pro Phe Gly Ser Pro Val Thr  
                         1090                      1095                      1100  
Pro Glu Val His Val Phe Thr Asn Val His Thr Asp Ala Cys Ala Asn  
1105                      1110                      1115                      1120  
Asn Ile Ala Gln Arg Ser Gln Ser Val Pro Leu Thr Val Met Met Gln  
                         1125                      1130                      1135  
Thr Ala Phe Pro Asn Ala Leu Gln Lys Gln Ala Asn Ser Lys Lys Ile  
                         1140                      1145                      1150  
Thr Asn Val Leu Leu Ser Lys Leu Asp Ser Asp Asn Asp Asp Ala Val  
                         1155                      1160                      1165  
Arg Gly Leu Gly Met Asn Asn Leu Pro Ser Asn Tyr Thr Ala Arg Met  
                         1170                      1175                      1180  
Asn Leu Thr Gln Ile Leu Glu Pro Ser Thr Val Phe Pro Ser Ala Asn  
1185                      1190                      1195                      1200  
Pro Gln Asn Met Ile Asp Ser Ser Thr Ser Val Tyr Glu Phe Gln Thr  
                         1205                      1210                      1215  
Pro Ser Tyr Leu Thr Lys Ser Asn Ser Thr Gly Gln Ile Asn Phe Ser  
                         1220                      1225                      1230  
Pro Gly Asp Asn Gln Ala Gln Ser Glu Ile Gly Glu Gln Gln Leu Asp  
                         1235                      1240                      1245  
Phe Asn Ser Thr Val Lys Asp Leu Leu Ser Gly Asp Ser Leu Gln Thr  
                         1250                      1255                      1260

Asn Gln Gln Leu Cys Ser Cys Pro Ser Ser Leu Leu Ala Gly Met Gln  
 1265 1270 1275 1280  
 Met

<210> 3280

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3280

Met Gly Pro Pro Gly Trp Ala Ile Thr Ser Gln Ala Leu Pro Ala Leu  
 1 5 10 15  
 His Ser Val Arg Ala Val Ala Val Ala Lys Glu Lys Phe Leu Lys Lys  
 20 25 30  
 Ala Ala Thr Asp Thr Ala Ala Ala Val Ser Ser Val Ala Ile Gln Ile  
 35 40 45  
 Thr Ile Ser Ile Leu Ser Leu Leu Lys Lys Ala Ala Val Gly Asn Lys  
 50 55 60  
 Ala Cys Lys Ser Trp Glu Trp Glu His Arg Pro Cys Lys Arg Asp Arg  
 65 70 75 80  
 Gly Gly Asn Ser Gly Gly Ser Ser Ser Ile Cys Tyr Val Leu Leu Gly  
 85 90 95  
 Phe Ile Gly Thr Ser Lys Thr His Leu Leu Leu Lys Trp Trp Pro Ser  
 100 105 110  
 Asp Gly Lys Gly Arg Ser Thr Thr Glu Val Lys Ile His Val Leu Phe  
 115 120 125  
 Leu

&lt;210&gt; 3281

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3281

Met Lys Ser Thr Tyr Phe Met Val Tyr Asn Leu Ile Asn Cys Pro Leu

1 5 10 15

Gly Lys Asn Asn Asn Arg Tyr Leu Phe Ile Gly Gln Leu Leu Trp Ala

20 25 30

Thr Asn Tyr Ala Glu Leu Phe Leu Ile Ser Phe His Phe Ile Leu Phe

35 40 45

Phe Glu Met Gly Ser His Ser Val Thr Gln Ala Gly Val Gln Trp Arg

50 55 60

Asn Leu Ser Leu Leu Gln Pro Leu Ser Ser Arg Pro Lys Gln Ser Ser

65 70 75 80

His Leu Ser Phe Leu Ser Ser Trp Asp His Met His Val Pro Leu Arg

85 90 95

Leu Ala Asn Phe Phe Leu Tyr Ile Trp

100 105

&lt;210&gt; 3282

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3282

Met Ala Arg Gly Glu Glu Gly Ser Pro Leu Ser Cys His His Pro Gly  
 1 5 10 15  
 Trp Leu Gln Ala Ala Pro Phe Cys Arg Gly Leu His Gly Asp Gly His  
 20 25 30  
 Cys His Arg Gly Pro Leu Thr Leu Asn Leu Gly Gly Cys Ile Ser Pro  
 35 40 45  
 His Arg Gly Pro Leu Gln Val Leu Arg Gln Pro Leu Gly Thr Gln His  
 50 55 60  
 Pro Thr Gln Ala Ser Cys Cys Cys His Thr Ser Ala Pro Pro Gly Gly  
 65 70 75 80  
 Ser Arg Gly Gln Asp Pro Arg Gly Pro Leu Val Gly Ala Leu Cys Gln  
 85 90 95  
 His Trp Pro Met Gly Asn Thr Pro Ala Ser Ser Leu Tyr Ser Glu Ser  
 100 105 110  
 Pro Gly Asn Val Ala Tyr Leu Ser Thr Pro Thr Leu Ala Pro Ser Pro  
 115 120 125  
 Val Gln Pro Gly Ser Pro Phe Leu Ser Ala Ser Arg Cys Pro Cys Pro  
 130 135 140  
 His Glu Thr Thr Gly Pro Pro His Asn Gly His Thr Leu Phe Ser Thr  
 145 150 155 160  
 Tyr Ser Gly Pro Ser His Gly Arg Ala Pro Met Thr Pro Phe His Pro  
 165 170 175  
 Ser Arg Glu Met Val Thr Lys Glu Leu Phe Ala Ser Ser Ser His Pro  
 180 185 190  
 Arg Arg Met Trp Trp Val  
 195



&lt;210&gt; 3283

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3283

Met Asn Leu Glu Glu Met Ala His Ser Ser Ser Ala Val Asp Leu Thr

1 5 10 15

Met Ser Pro Gly Leu Ile Ile Gly Lys Ser Phe Ala Lys Lys Asn Glu

20 25 30

Tyr Gly Gly Glu Thr Ile Tyr Leu Glu Glu Leu Phe Lys Ile Ser Lys

35 40 45

Leu Gly His Glu Thr Trp Trp Gln Arg Leu Ala Ala Pro Gly Lys Ser

50 55 60

Ala Met Gly Cys Ala Gly Thr Ser Arg Leu Val Arg Ser Leu Ala Cys

65 70 75 80

Gln Val Met Ser Thr Gln Thr Val Asp Ile Gly Trp Gly Leu Ala Ala

85 90 95

Lys Ile Asn Phe Ser His

100

&lt;210&gt; 3284

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3284

Met Leu His Thr Glu Gly His Ala Leu Leu Arg Ala Val Gly Gln Gly  
 1 5 10 15  
 Lys Leu Arg Leu Ala Arg Leu Leu Leu Glu Gly Gly Ala Tyr Val Asn  
 20 25 30  
 Glu Gly Asp Ala Gln Gly Glu Thr Ala Leu Met Ala Ala Cys Arg Ala  
 35 40 45  
 Arg Tyr Asp Asp Pro Gln Asn Lys Ala Arg Met Val Arg Tyr Leu Leu  
 50 55 60  
 Glu Gln Gly Ala Asp Pro Asn Ile Ala Asp Arg Leu Gly Arg Thr Ala  
 65 70 75 80  
 Leu Met His Ala Cys Ala Gly Gly Gly Gly Ala Ala Val Ala Ser Leu  
 85 90 95  
 Leu Leu Ala His Gly Ala Asp Pro Ser Val Arg Asp His Ala Gly Ala  
 100 105 110  
 Ser Ala Leu Val His Ala Leu Asp Arg Gly Asp Arg Glu Thr Leu Ala  
 115 120 125  
 Thr Leu Leu Asp Ala Cys Lys Ala Lys Gly Thr Glu Val Ile Ile Ile  
 130 135 140  
 Thr Thr Asp Thr Ser Pro Ser Gly Thr Lys Lys Thr Arg Gln Tyr Leu  
 145 150 155 160  
 Asn Ser Pro Pro Ser Pro Gly Val Glu Asp Pro Ala Pro Ala Ser Pro  
 165 170 175  
 Ser Pro Gly Phe Cys Thr Ser Pro Ser Glu Ile Gln Leu Gln Thr Ala  
 180 185 190  
 Gly Gly Gly Gly Arg Gly Met Leu Ser Pro Arg Ala Gln Glu Glu Glu  
 195 200 205  
 Glu Lys Arg Asp Val Phe Glu Phe Pro Leu Pro Lys Pro Pro Asp Asp  
 210 215 220  
 Pro Ser Pro Ser Glu Pro Leu Pro Lys Pro Pro Arg His Pro Pro Lys

225                      230                      235                      240  
Pro Leu Lys Arg Leu Asn Ser Glu Pro Trp Gly Leu Val Ala Pro Pro  
                                 245                      250                      255  
Gln Pro Val Pro Pro Thr Glu Gly Arg Pro Gly Ile Glu Arg Leu Thr  
                                 260                      265                      270  
Ala Glu Phe Asn Gly Leu Thr Leu Thr Gly Arg Pro Arg Leu Ser Arg  
                                 275                      280                      285  
Arg His Ser Thr Glu Gly Pro Glu Asp Pro Pro Pro Trp Ala Glu Lys  
                                 290                      295                      300  
Val Thr Ser Gly Gly Pro Leu Ser Arg Arg Asn Thr Ala Pro Glu Ala  
305                      310                      315                      320  
Gln Glu Ser Gly Pro Pro Ser Gly Leu Arg Gln Lys Leu Ser Arg Met  
                                 325                      330                      335  
Glu Pro Val Glu Leu Asp Thr Pro Gly His Leu Cys Pro Asp Ser Pro  
                                 340                      345                      350  
Glu Ser Ser Arg Leu Ser Leu Glu Arg Arg Arg Tyr Ser Ala Ser Pro  
                                 355                      360                      365  
Leu Thr Leu Pro Pro Ala Gly Ser Ala Pro Ser Pro Arg Gln Ser Gln  
                                 370                      375                      380  
Glu Ser Leu Pro Gly Ala Val Ser Pro Leu Ser Gly Arg Arg Arg Ser  
385                      390                      395                      400  
Pro Gly Leu Leu Glu Arg Arg Gly Ser Gly Thr Leu Leu Leu Asp His  
                                 405                      410                      415  
Ile Ser Gln Thr Arg Pro Gly Phe Leu Pro Pro Leu Asn Val Ser Pro  
                                 420                      425                      430  
His Pro Pro Ile Pro Asp Ile Arg Pro Gln Pro Gly Gly Arg Ala Pro  
                                 435                      440                      445  
Ser Leu Pro Ala Pro Pro Tyr Ala Gly Ala Pro Gly Ser Pro Arg Thr  
                                 450                      455                      460



130 135 140  
Gly Ile Gly Ser Thr Gln Thr Asn Gly Pro Ser Val Pro Ser Glu Glu  
145 150 155 160  
Glu Ile Val Gln Pro Leu Asp Ser Thr Arg Val Ala Ser Tyr Ser Gly  
165 170 175  
Thr Val Thr Gln Ala Thr Phe Thr Arg Thr Tyr Asp Gly Pro Gly Ser  
180 185 190  
Gln Pro Val Ile Cys Gln Ser Ser Val Tyr Gly Thr Leu Glu Asn Lys  
195 200 205  
Val Asp Ile Leu Asp Ala Ala Val Gln Thr Lys Thr Gly Thr Leu Gln  
210 215 220  
Asp Leu Ile Gln His Gly Ser Pro Ile Asn Asn Glu Cys His Pro Ser  
225 230 235 240  
Leu Glu Arg Lys Asp Asp Asn Met Gly Cys Ala Val Ile Asn Pro Glu  
245 250 255  
Pro Ile Thr Leu Thr Phe Glu Lys Asn Ala His Val Pro Ile Gln Thr  
260 265 270  
Glu Gly Val Asn Thr Ala Asp Glu Pro Thr Thr Phe Lys Lys Glu Leu  
275 280 285  
Ile Lys Gln Val Ser Pro Ala Ala Ser Leu Arg His Pro Val Ser Thr  
290 295 300  
Ser Glu Asn Ala Arg Thr Gln Gly Leu Arg Asp Ile Pro Ser Leu Val  
305 310 315 320  
Val Ala Gly Gln Lys Gly Thr Lys Tyr Leu Cys Ala Ser Ser Val Gly  
325 330 335  
Gly Glu Thr Leu Asp Lys Ala Val Cys Ser Leu Gln Lys Glu Thr Pro  
340 345 350  
Leu Pro Val Ser Leu Pro Ser Asp Lys Thr Met Val Met Glu Ala Leu  
355 360 365

Ser Leu Ala Lys Ser Ser Ser His Leu Ser Pro Ser Glu Glu Val Arg  
370 375 380  
Cys Thr Gln Asp Phe Leu Ser Gln Thr Gln Ser Leu Leu Gly Leu Ser  
385 390 395 400  
Ser Glu Gly Leu Leu Glu Leu Thr Gln Val Glu Val Asp Ser Ser Ser  
405 410 415  
Ala Ser Thr Thr Leu Gly Arg Gln Cys Ser Leu Asn Cys Ile Ser Ser  
420 425 430  
Gly Cys His Thr Ser Gly Asp Ser Leu Glu Leu Arg Lys Asn His Lys  
435 440 445  
Asn Gly Pro Asn Thr Glu Asn Met Asn Leu Glu Ala Phe Asp Ser Val  
450 455 460  
Phe Ile Lys Gln Thr Ser Leu Ser Val Ser Arg Glu Val Ser Leu Glu  
465 470 475 480  
Leu Ser Glu Glu Asp Ser Asp Ile Asp Leu Ala Leu Thr Ile Ser Pro  
485 490 495  
Pro Thr Ser Pro Arg Glu Glu Met Pro Ala Gly Glu Ile Glu Gln Phe  
500 505 510  
Glu Glu Ala Pro Phe Ser Asn Leu Glu Leu Gln Asp Val Ala Glu Glu  
515 520 525  
Ile Gly Glu Pro Glu Glu Val Ala Leu Thr Glu Ser Arg Glu Val Ser  
530 535 540  
Ser Ala Asp Asn Val Ser Val Tyr Pro Ser Val Ser Glu Glu Pro Val  
545 550 555 560  
Glu Asn Lys Glu Arg Lys Gly Asp Asn Leu Gln Pro Val Thr Leu Ile  
565 570 575  
Leu Ser Lys Glu Asn Cys Thr Leu Glu Ile Ala Glu Glu Ile Asn Val  
580 585 590  
Thr Ser Asp Phe Pro Phe Asp Ser Val Ile Glu Glu Val Ser Pro Ala

595                      600                      605  
Ser Ser Pro Glu Pro Pro Val Pro Val Lys Glu Thr Arg Pro Tyr Gln  
610                      615                      620  
Ala Val Thr Pro Cys Ile Leu Lys Leu His Gly Thr Gln Cys Glu Lys  
625                      630                      635                      640  
Ser Asn Gln Ile Ser Gln Cys Glu Ser Glu Asp Leu Gly Ile Thr Glu  
645                      650                      655  
Lys Glu Asn Val Phe Val Gly Pro Thr His Pro Val Gly Gln Asp Asn  
660                      665                      670  
Phe Thr Gln Val Gln Gln Met Gln Val Ser Ala Glu Met Pro Leu Ile  
675                      680                      685  
Leu Thr Asp His Pro Gly Arg Thr Gly Arg Pro Thr Leu Pro Gly Lys  
690                      695                      700  
Val Thr Glu Glu Ile Val Ser Ser Glu His Asp Glu Gly Leu Ser Phe  
705                      710                      715                      720  
Ser Gly Lys Val Gln Cys Tyr Gly Arg Glu Leu Asn Gln Pro Ala Ser  
725                      730                      735  
Ala Ala Lys Cys Thr Gly Asp Phe Ser Pro Ser Pro Glu Lys Leu Val  
740                      745                      750  
Lys Ser Gly Asn Pro Leu Gln Pro Val Ser Ile Glu Asn Arg Asn Leu  
755                      760                      765  
Asp Leu Lys His Leu Val Leu Glu Ser Ser Glu Pro Pro Phe Gly Pro  
770                      775                      780  
Arg Asn Val Ile Glu Asn Lys Ser Leu Ser Asp Thr Leu Val Ser Thr  
785                      790                      795                      800  
Thr Ala Pro Ser Gly Ile Val Asn Val Ser Val Lys Gln Gln Thr Ser  
805                      810                      815  
Pro Lys Ser Ser Gln Asn His Leu Phe Pro Gly Asp Leu Lys Thr Asp  
820                      825                      830

Glu Gly Ile Tyr Leu Gln Val Lys Ser Leu Thr Ala Ala Ser Val Asp  
835 840 845

Gly Ala Tyr Ser Thr Gln Gly Cys Met Cys Ser Val Val Pro Thr Leu  
850 855 860

Cys Ser Ser Ser Asp Asn Ala Thr Leu Thr His Tyr Val Arg Pro Ile  
865 870 875 880

Asn Ala Glu Pro Ala Phe Gln Ala Gln Glu Ile Pro Ala Gly Arg Met  
885 890 895

Ala Ser Leu Leu Lys Asn Gly Glu Pro Glu Ala Glu Leu His Lys Glu  
900 905 910

Thr Thr Gly Pro Gly Thr Ala Gly Pro Gln Ser Asn Thr Thr Ser Ser  
915 920 925

Leu Lys Gly Glu Arg Lys Ala Ile His Thr Leu Gln Asp Val Ser Thr  
930 935 940

Cys Glu Thr Lys Glu Leu Leu Asn Val Gly Val Ser Ser Leu Cys Ala  
945 950 955 960

Gly Pro Tyr Gln Asn Thr Ala Asp Thr Lys Glu Asn Leu Ser Lys Glu  
965 970 975

Pro Leu Ala Ser Phe Val Ser Glu Ser Phe Asp Thr Ser Val Cys Gly  
980 985 990

Ile Ala Thr Glu His Val Glu Ile Glu Asn Ser Gly Glu Gly Leu Arg  
995 1000 1005

Ala Glu Ala Gly Ser Glu Thr Leu Gly Arg Asp Gly Glu Val Gly Val  
1010 1015 1020

Asn Ser Asp Met His Tyr Glu Leu Ser Gly Asp Ser Asp Leu Asp Leu  
1025 1030 1035 1040

Leu Gly Asp Cys Arg Asn Pro Arg Leu Asp Leu Glu Asp Ser Tyr Thr  
1045 1050 1055

Leu Arg Gly Ser Tyr Thr Arg Lys Lys Asp Val Pro Thr Asp Gly Tyr



1060	1065	1070	
Glu Ser Ser Leu Asn Phe His Asn Asn Asn Gln Glu Asp Trp Gly Cys			
1075	1080	1085	
Ser Ser Trp Val Pro Gly Met Glu Thr Ser Leu Pro Pro Gly His Trp			
1090	1095	1100	
Thr Ala Ala Val Lys Lys Glu Glu Lys Cys Val Pro Pro Tyr Val Gln			
1105	1110	1115	1120
Ile Arg Asp Leu His Gly Ile Leu Arg Thr Tyr Ala Asn Phe Ser Ile			
1125	1130	1135	
Thr Lys Glu Leu Lys Asp Thr Met Arg Thr Ser His Gly Leu Arg Arg			
1140	1145	1150	
His Pro Ser Phe Ser Ala Asn Cys Gly Leu Pro Ser Ser Trp Thr Ser			
1155	1160	1165	
Thr Trp Gln Val Ala Asp Asp Leu Thr Gln Asn Thr Leu Asp Leu Glu			
1170	1175	1180	
Tyr Leu Arg Phe Ala His Lys Leu Lys Gln Thr Ile Lys Asn Gly Asp			
1185	1190	1195	1200
Ser Gln His Ser Ala Ser Ser Ala Asn Val Phe Pro Lys Glu Ser Pro			
1205	1210	1215	
Thr Gln Ile Ser Ile Gly Ala Phe Pro Ser Thr Lys Ile Ser Glu Ala			
1220	1225	1230	
Pro Phe Leu His Pro Ala Pro Arg Ser Arg Ser Pro Leu Leu Val Thr			
1235	1240	1245	
Val Val Glu Ser Asp Pro Arg Pro Gln Gly Gln Pro Arg Arg Gly Tyr			
1250	1255	1260	
Thr Ala Ser Ser Leu Asp Ser Ser Ser Ser Trp Arg Glu Arg Cys Ser			
1265	1270	1275	1280
His Asn Arg Asp Leu Arg Asn Ser Gln Arg Asn His Thr Val Ser Phe			
1285	1290	1295	

His Leu Asn Lys Leu Lys Tyr Asn Ser Thr Val Lys Glu Ser Arg Asn  
1300 1305 1310  
Asp Ile Ser Leu Ile Leu Asn Glu Tyr Ala Glu Phe Asn Lys Val Met  
1315 1320 1325  
Lys Asn Ser Asn Gln Phe Ile Phe Gln Asp Lys Glu Leu Asn Asp Val  
1330 1335 1340  
Ser Gly Glu Ala Thr Ala Gln Glu Met Tyr Leu Pro Phe Pro Gly Arg  
1345 1350 1355 1360  
Ser Ala Ser Tyr Glu Asp Ile Ile Ile Asp Val Cys Thr Asn Leu His  
1365 1370 1375  
Val Lys Leu Arg Ser Val Val Lys Glu Ala Cys Lys Ser Thr Phe Leu  
1380 1385 1390  
Phe Tyr Leu Val Glu Thr Glu Asp Lys Ser Phe Phe Val Arg Thr Lys  
1395 1400 1405  
Asn Leu Leu Arg Lys Gly Gly His Thr Glu Ile Glu Pro Gln His Phe  
1410 1415 1420  
Cys Gln Ala Phe His Arg Glu Asn Asp Thr Leu Ile Ile Ile Ile Arg  
1425 1430 1435 1440  
Asn Glu Asp Ile Ser Ser His Leu His Gln Ile Pro Ser Leu Leu Lys  
1445 1450 1455  
Leu Lys His Phe Pro Ser Val Ile Phe Ala Gly Val Asp Ser Pro Gly  
1460 1465 1470  
Asp Val Leu Asp His Thr Tyr Gln Glu Leu Phe Arg Ala Gly Gly Phe  
1475 1480 1485  
Val Ile Ser Asp Asp Lys Ile Leu Glu Ala Val Thr Leu Val Gln Leu  
1490 1495 1500  
Lys Glu Ile Ile Lys Ile Leu Glu Lys Leu Asn Gly Asn Gly Arg Trp  
1505 1510 1515 1520  
Lys Trp Leu Leu His Tyr Arg Glu Asn Lys Lys Leu Lys Glu Asp Glu



Ala Pro Ser Arg Thr Gly Val Ser Val Leu Ser Ala Arg Asp Tyr His  
 50 55 60  
 Gly Gly His Leu Ser Thr Ser Ser Ser Ser Gly Ser Gly Val Ser Phe  
 65 70 75 80  
 Ala Ile Pro Val Ser Phe Arg Asp Phe Leu Phe Phe Ser Ser Arg Ser  
 85 90 95  
 Gly Ser Leu Arg Ile Ile Leu Leu Phe Pro Ser Gly  
 100 105

<210> 3287

<211> 654

<212> PRT

<213> Homo sapiens

<400> 3287

Met Ala Thr Leu Ala Cys Arg Val Gln Phe Leu Asp Asp Thr Asp Pro  
 1 5 10 15  
 Phe Asn Ser Thr Asn Phe Pro Glu Pro Ser Arg Pro Pro Leu Phe Thr  
 20 25 30  
 Phe Arg Glu Asp Leu Ala Leu Gly Thr Gln Leu Ala Gly Val His Arg  
 35 40 45  
 Leu Leu Gln Ala Pro His Lys Leu Asp Asp Cys Thr Leu Gln Leu Ser  
 50 55 60  
 His Asn Gly Ala Tyr Leu Asp Leu Glu Ala Thr Leu Ala Glu Gln Arg  
 65 70 75 80  
 Asp Glu Leu Glu Gly Phe Gln Asp Asp Ala Gly Arg Gly Lys Lys His  
 85 90 95  
 Ser Ile Ile Leu Arg Thr Gln Leu Ser Val Arg Val His Ala Cys Ile

100	105	110	
Glu Lys Leu Tyr Asn Ser Ser Gly Arg Asp Leu Arg Arg Ala Leu Phe			
115	120	125	
Ser Leu Lys Gln Ile Phe Gln Asp Asp Lys Asp Leu Val His Glu Phe			
130	135	140	
Val Val Ala Glu Gly Leu Thr Cys Leu Ile Lys Val Gly Ala Glu Ala			
145	150	155	160
Asp Gln Asn Tyr Gln Asn Tyr Ile Leu Arg Ala Leu Gly Gln Ile Met			
165	170	175	
Leu Tyr Val Asp Gly Met Asn Gly Val Ile Asn Arg Asn Glu Thr Ile			
180	185	190	
Gln Trp Leu Tyr Thr Leu Ile Gly Ser Lys Phe Arg Leu Val Val Lys			
195	200	205	
Thr Ala Leu Lys Leu Leu Leu Val Phe Val Glu Tyr Ser Glu Ser Asn			
210	215	220	
Ala Pro Leu Leu Ile Gln Ala Val Thr Ala Val Asp Thr Lys Arg Gly			
225	230	235	240
Val Lys Pro Trp Ser Asn Ile Met Glu Ile Leu Glu Glu Lys Asp Gly			
245	250	255	
Val Asp Thr Glu Leu Leu Val Tyr Ala Met Thr Leu Val Asn Lys Thr			
260	265	270	
Leu Ser Gly Leu Pro Asp Gln Asp Thr Phe Tyr Asp Val Val Asp Cys			
275	280	285	
Leu Glu Glu Leu Gly Ile Ala Ala Val Ser Gln Arg His Leu Asn Lys			
290	295	300	
Lys Gly Thr Asp Leu Asp Leu Val Glu Gln Leu Asn Ile Tyr Glu Val			
305	310	315	320
Ala Leu Arg His Glu Asp Gly Asp Glu Thr Thr Glu Pro Pro Pro Ser			
325	330	335	

Gly Cys Arg Asp Arg Arg Arg Ala Ser Val Cys Ser Ser Gly Gly Gly  
340 345 350  
Glu His Arg Gly Leu Asp Arg Arg Arg Ser Arg Arg His Ser Val Gln  
355 360 365  
Ser Ile Lys Ser Thr Leu Ser Ala Pro Thr Ser Pro Cys Ser Gln Ser  
370 375 380  
Ala Pro Ser Phe Lys Pro Asn Gln Val Arg Asp Leu Arg Glu Lys Tyr  
385 390 395 400  
Ser Asn Phe Gly Asn Asn Ser Tyr His Ser Ser Arg Pro Ser Ser Gly  
405 410 415  
Ser Ser Val Pro Thr Thr Pro Thr Ser Ser Val Ser Pro Pro Gln Glu  
420 425 430  
Ala Arg Leu Glu Arg Ser Ser Pro Ser Gly Leu Leu Thr Ser Ser Phe  
435 440 445  
Arg Gln His Gln Glu Ser Leu Ala Ala Glu Arg Glu Arg Arg Arg Gln  
450 455 460  
Glu Arg Glu Glu Arg Leu Gln Arg Ile Glu Arg Glu Glu Arg Asn Lys  
465 470 475 480  
Phe Arg Tyr Lys Tyr Leu Glu Gln Leu Ala Ala Glu Glu His Glu Lys  
485 490 495  
Glu Leu Arg Ser Arg Ser Val Ser Arg Gly Arg Ala Asp Leu Ser Leu  
500 505 510  
Asp Leu Thr Ser Pro Ala Ala Pro Ala Cys Leu Ala Pro Leu Ser His  
515 520 525  
Ser Pro Ser Ser Ser Asp Ser Gln Glu Ala Leu Thr Val Ser Ala Ser  
530 535 540  
Ser Pro Gly Thr Pro His His Pro Gln Ala Ser Ala Gly Asp Pro Glu  
545 550 555 560  
Pro Glu Ser Glu Ala Glu Pro Glu Ala Glu Ala Gly Ala Gly Gln Val

	565		570		575										
Ala	Asp	Glu	Ala	Gly	Gln	Asp	Ile	Ala	Ser	Ala	His	Glu	Gly	Ala	Glu
	580		585		590										
Thr	Glu	Val	Glu	Gln	Ala	Leu	Glu	Gln	Glu	Pro	Glu	Glu	Arg	Ala	Ser
	595		600		605										
Leu	Ser	Glu	Lys	Glu	Arg	Gln	Asn	Glu	Gly	Val	Asn	Glu	Arg	Asp	Asn
	610		615		620										
Cys	Ser	Ala	Ser	Ser	Val	Ser	Ser	Ser	Ser	Ser	Thr	Leu	Glu	Arg	Glu
	625		630		635						640				
Glu	Lys	Glu	Asp	Lys	Leu	Ser	Arg	Asp	Arg	Thr	Thr	Gly	Lys		
	645		650												

&lt;210&gt; 3288

&lt;211&gt; 305

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3288

Met	Val	Cys	Ile	Val	Ile	Gly	Ala	Arg	Lys	Leu	Gly	Val	Asn	Pro	Asp
1				5						10				15	
Asn	Ile	Ala	Thr	Pro	Ile	Ala	Ala	Ser	Leu	Gly	Asp	Leu	Ile	Thr	Leu
				20					25					30	
Ser	Ile	Leu	Ala	Leu	Val	Ser	Ser	Phe	Phe	Tyr	Arg	His	Lys	Asp	Ser
			35					40					45		
Arg	Tyr	Leu	Thr	Pro	Leu	Val	Cys	Leu	Ser	Phe	Ala	Ala	Leu	Thr	Pro
			50				55						60		
Val	Trp	Val	Leu	Ile	Ala	Lys	Gln	Ser	Pro	Pro	Ile	Val	Lys	Ile	Leu
			65				70						75		80

Lys Phe Gly Trp Phe Pro Ile Ile Leu Ala Met Val Ile Ser Ser Phe  
                             85                            90                            95  
 Gly Gly Leu Ile Leu Ser Lys Thr Val Ser Lys Gln Gln Tyr Lys Gly  
                             100                            105                            110  
 Met Ala Ile Phe Thr Pro Val Ile Cys Gly Val Gly Gly Asn Leu Val  
                             115                            120                            125  
 Ala Ile Gln Thr Ser Arg Ile Ser Thr Tyr Leu His Met Trp Ser Ala  
                             130                            135                            140  
 Pro Gly Val Leu Pro Leu Gln Met Lys Lys Phe Trp Pro Asn Pro Tyr  
 145                            150                            155                            160  
 Ser Thr Phe Cys Thr Ser Glu Ile Asn Ser Met Ser Ala Arg Val Leu  
                             165                            170                            175  
 Leu Leu Leu Val Val Pro Gly His Leu Ile Phe Phe Tyr Ile Ile Tyr  
                             180                            185                            190  
 Leu Val Glu Gly Gln Ser Val Ile Asn Ser Gln Thr Phe Val Val Leu  
                             195                            200                            205  
 Tyr Leu Leu Ala Gly Leu Ile Gln Val Thr Ile Leu Leu Tyr Leu Ala  
                             210                            215                            220  
 Glu Val Met Val Arg Leu Thr Trp His Gln Ala Leu Asp Pro Asp Asn  
 225                            230                            235                            240  
 His Cys Ile Pro Tyr Leu Thr Gly Leu Gly Asp Leu Leu Gly Ser Ser  
                             245                            250                            255  
 Ser Val Gly His Thr Ala Ala Val Pro Arg Arg Cys Thr Ala Ser Pro  
                             260                            265                            270  
 Gly Trp Gly Leu Ile Gln Pro Phe Ile Cys Thr Gln His Leu Ile Val  
                             275                            280                            285  
 Ser Leu Leu Ser Phe Tyr Phe Pro Phe Cys Leu Leu Ala Lys Thr Ser  
                             290                            295                            300  
 Ile



305

&lt;210&gt; 3289

&lt;211&gt; 1181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3289

Met Asn Leu Glu Ala Phe Asp Ser Val Phe Ile Lys Gln Thr Ser Leu

1 5 10 15

Ser Val Ser Arg Glu Val Ser Leu Glu Leu Ser Glu Glu Asp Ser Asp

20 25 30

Ile Asp Leu Ala Leu Thr Ile Ser Pro Pro Thr Ser Pro Arg Glu Glu

35 40 45

Met Pro Ala Gly Glu Ile Glu Gln Phe Glu Glu Ala Pro Phe Ser Asn

50 55 60

Leu Glu Leu Gln Asp Val Ala Glu Glu Ile Gly Glu Pro Glu Glu Val

65 70 75 80

Ala Leu Thr Glu Ser Arg Glu Val Ser Ser Ala Asp Asn Val Ser Val

85 90 95

Tyr Pro Ser Val Ser Glu Glu Pro Val Glu Asn Lys Glu Arg Lys Gly

100 105 110

Asp Asn Leu Gln Pro Val Thr Leu Ile Leu Ser Lys Glu Asn Cys Thr

115 120 125

Leu Glu Ile Ala Glu Glu Ile Asn Val Thr Ser Asp Phe Pro Phe Asp

130 135 140

Ser Val Ile Glu Glu Val Ser Pro Ala Ser Ser Pro Glu Pro Pro Val

145 150 155 160

Pro Val Lys Glu Thr Arg Pro Tyr Gln Ala Val Thr Pro Cys Ile Leu  
 165 170 175  
 Lys Leu His Gly Thr Gln Cys Glu Lys Ser Asn Gln Ile Ser Gln Cys  
 180 185 190  
 Glu Ser Glu Asp Leu Gly Ile Thr Glu Lys Glu Asn Val Phe Val Gly  
 195 200 205  
 Pro Thr His Pro Val Gly Gln Asp Asn Phe Thr Gln Val Gln Gln Met  
 210 215 220  
 Gln Val Ser Ala Glu Met Pro Leu Ile Leu Thr Asp His Pro Gly Arg  
 225 230 235 240  
 Thr Gly Arg Pro Thr Leu Pro Gly Lys Val Thr Glu Glu Ile Val Ser  
 245 250 255  
 Ser Glu His Asp Glu Gly Leu Ser Phe Ser Gly Lys Val Gln Cys Tyr  
 260 265 270  
 Gly Arg Glu Leu Asn Gln Pro Ala Ser Ala Ala Lys Cys Thr Gly Asp  
 275 280 285  
 Phe Ser Pro Ser Pro Glu Lys Leu Val Lys Ser Gly Asn Pro Leu Gln  
 290 295 300  
 Pro Val Ser Ile Glu Asn Arg Asn Leu Asp Leu Lys His Leu Val Leu  
 305 310 315 320  
 Glu Ser Ser Glu Pro Pro Phe Gly Pro Arg Asn Val Ile Glu Asn Lys  
 325 330 335  
 Ser Leu Ser Asp Thr Leu Val Ser Thr Thr Ala Pro Ser Gly Ile Val  
 340 345 350  
 Asn Val Ser Val Lys Gln Gln Thr Ser Pro Lys Ser Ser Gln Asn His  
 355 360 365  
 Leu Phe Pro Gly Asp Leu Lys Thr Asp Gly Gly Ile Tyr Leu Gln Val  
 370 375 380  
 Lys Ser Leu Thr Ala Ala Ser Val Asp Gly Ala Tyr Ser Thr Gln Gly

出証特 2 0 0 4 - 3 0 5 9 6 6 1

Asn Asn Asn Gln Glu Asp Trp Gly Cys Ser Ser Trp Val Pro Gly Met  
625 630 635 640  
Glu Thr Ser Leu Pro Pro Gly His Trp Thr Ala Ala Val Lys Lys Glu  
645 650 655  
Glu Lys Cys Val Pro Pro Tyr Val Gln Ile Arg Asp Leu His Gly Ile  
660 665 670  
Leu Arg Thr Tyr Ala Asn Phe Ser Ile Thr Lys Glu Leu Lys Asp Thr  
675 680 685  
Met Arg Thr Ser His Gly Leu Arg Arg His Pro Ser Phe Ser Ala Asn  
690 695 700  
Cys Gly Leu Pro Ser Ser Trp Thr Ser Thr Trp Gln Val Ala Asp Asp  
705 710 715 720  
Leu Thr Gln Asn Thr Leu Asp Leu Glu Tyr Leu Arg Phe Ala His Lys  
725 730 735  
Leu Lys Gln Thr Ile Lys Asn Gly Asp Ser Gln His Ser Ala Ser Ser  
740 745 750  
Ala Asn Val Phe Pro Lys Glu Ser Pro Thr Gln Ile Ser Ile Gly Ala  
755 760 765  
Phe Pro Ser Thr Lys Ile Ser Glu Ala Pro Phe Leu His Pro Ala Pro  
770 775 780  
Arg Ser Arg Ser Pro Leu Leu Val Thr Val Val Glu Ser Asp Pro Arg  
785 790 795 800  
Pro Gln Gly Gln Pro Arg Arg Gly Tyr Thr Ala Ser Ser Leu Asp Ser  
805 810 815  
Ser Ser Ser Trp Arg Glu Arg Cys Ser His Asn Arg Asp Leu Arg Asn  
820 825 830  
Ser Gln Arg Asn His Thr Val Ser Phe His Leu Asn Lys Leu Lys Tyr  
835 840 845  
Asn Ser Thr Val Lys Glu Ser Arg Asn Asp Ile Ser Leu Ile Leu Asn

850                      855                      860  
Glu Tyr Ala Glu Phe Asn Lys Val Met Lys Asn Ser Asn Gln Phe Ile  
865                      870                      875                      880  
Phe Gln Asp Lys Glu Leu Asn Asp Val Ser Gly Glu Ala Thr Ala Gln  
                    885                      890                      895  
Glu Met Tyr Leu Pro Phe Pro Gly Arg Ser Ala Ser Tyr Glu Asp Ile  
                    900                      905                      910  
Ile Ile Asp Val Cys Thr Asn Leu His Val Lys Leu Arg Ser Val Val  
                    915                      920                      925  
Lys Glu Ala Cys Lys Ser Thr Phe Leu Phe Tyr Leu Val Glu Thr Glu  
                    930                      935                      940  
Asp Lys Ser Phe Phe Val Arg Thr Lys Asn Leu Leu Arg Lys Gly Gly  
945                      950                      955                      960  
His Thr Glu Ile Glu Pro Gln His Phe Cys Gln Ala Phe His Arg Glu  
                    965                      970                      975  
Asn Asp Thr Leu Ile Ile Ile Ile Arg Asn Glu Asp Ile Ser Ser His  
                    980                      985                      990  
Leu His Gln Ile Pro Ser Leu Leu Lys Leu Lys His Phe Pro Ser Val  
                    995                      1000                      1005  
Ile Phe Ala Gly Val Asp Ser Pro Gly Asp Val Leu Asp His Thr Tyr  
1010                      1015                      1020  
Gln Glu Leu Phe Arg Ala Gly Gly Phe Val Ile Ser Asp Asp Lys Ile  
1025                      1030                      1035                      1040  
Leu Glu Ala Val Thr Leu Val Gln Leu Lys Glu Ile Ile Lys Ile Leu  
                    1045                      1050                      1055  
Glu Lys Leu Asn Gly Asn Gly Arg Trp Lys Trp Leu Leu His Tyr Arg  
                    1060                      1065                      1070  
Glu Asn Lys Lys Leu Lys Glu Asp Glu Arg Val Asp Ser Thr Ala His  
                    1075                      1080                      1085

Lys Lys Asn Ile Met Leu Lys Ser Phe Gln Ser Ala Asn Ile Ile Glu

1090

1095

1100

Leu Leu His Tyr His Gln Cys Asp Ser Arg Ser Ser Thr Lys Ala Glu

1105

1110

1115

1120

Ile Leu Lys Cys Leu Leu Asn Leu Gln Ile Gln His Ile Asp Ala Arg

1125

1130

1135

Phe Ala Val Leu Leu Thr Asp Lys Pro Thr Ile Pro Arg Glu Val Phe

1140

1145

1150

Glu Asn Asn Gly Ile Leu Val Thr Asp Val Asn Asn Phe Ile Glu Asn

1155

1160

1165

Ile Glu Lys Ile Ala Ala Pro Phe Arg Ser Ser Tyr Trp

1170

1175

1180

<210> 3290

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3290

Met Leu Pro Ala His Thr Trp Val Gly Lys Gly Ser His Thr Leu Gly

1

5

10

15

Leu Leu Met Glu Arg Gly Ser Glu Gly Arg Gln Glu Gln Pro Pro Arg

20

25

30

Arg Pro Leu Arg Pro Arg Leu Asp Gly Ser Gly Pro Ala Leu Pro Pro

35

40

45

Asp Leu Cys Leu Ser Ala Ala Arg Ser Ser Ala Ser Pro Ser Arg Ser

50

55

60

Thr Cys Thr Arg Ser Arg Ser Arg Pro Asn Ser Ser Ser Ser Arg Arg

65                      70                      75                      80  
 Ser Ser Arg Ser Ser Cys Trp His Ser Trp Ser Ala Arg Ala Gly Ser  
                             85                      90                      95  
 Trp Pro Arg Ala Trp Leu Ser Ser Pro Arg Arg Ala Ala Phe Cys Cys  
                             100                      105                      110  
 Ser Arg Lys Arg Thr Phe Ser Met Lys Leu Ala Lys Arg Ser Leu Ser  
                             115                      120                      125  
 Ser Cys Ser Ser Cys Phe Ser Leu Leu Arg Val Ala Arg Asn Ser Trp  
                             130                      135                      140  
 Leu Arg Ala Ser Ala Met Glu Lys Ser Arg Arg Ser Glu Gly Arg Arg  
 145                      150                      155                      160  
 Arg Arg Ala Pro Ala Pro Ala Arg Gly Leu Arg Lys Leu Pro Arg Arg  
                             165                      170                      175  
 Thr Glu Glu Leu Gly Asp Ala Glu Pro Ser Arg Arg Leu Leu Glu Lys  
                             180                      185                      190  
 Arg Glu Leu Asp Glu  
                             195

<210> 3291

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3291

Met Ser Phe Asn Gln Asn Ser Ala Ser Gly Lys His Glu His Leu Asn  
     1                      5                      10                      15  
 Leu Thr Glu Asp Phe Gln Ser Ser Glu Cys Lys Glu Ser Leu Met Asp  
                             20                      25                      30

Leu Ser His Leu Asn Lys Trp Glu Ser Ile Pro Asn Thr Glu Lys Ser  
 35 40 45  
 Tyr Lys Cys Asp Val Cys Gly Lys Ile Phe His Gln Ser Ser Ala Leu  
 50 55 60  
 Thr Arg His Gln Arg Ile His Thr Arg Glu Lys Pro Tyr Lys Cys Lys  
 65 70 75 80  
 Glu Cys Glu Lys Ser Phe Ser Gln Ser Ser Ser Leu Ser Arg His Lys  
 85 90 95  
 Arg Ile His Thr Arg Glu Lys Pro Tyr Lys Cys Glu Ala Ser Asp Lys  
 100 105 110  
 Ser Cys Glu Ala Ser Asp Lys Ser Cys Ser Pro Ser Ser Gly Ile Ile  
 115 120 125  
 Gln His Lys Lys Ile His Thr Arg Ala Lys Ser Tyr Lys Cys Ser Ser  
 130 135 140  
 Cys Glu Arg Val Phe Ser Arg Ser Val His Leu Thr Gln His Gln Lys  
 145 150 155 160  
 Ile His Lys Glu Met Pro Cys Lys Cys Thr Val Cys Gly Ser Asp Phe  
 165 170 175  
 Cys His Thr Ser Tyr Leu Leu Glu His Gln Arg Val His His Glu Glu  
 180 185 190  
 Lys Ala Tyr Glu Tyr Asp Glu Tyr Gly Leu Ala Tyr Ile Lys Gln Gln  
 195 200 205  
 Gly Ile His Phe Arg Glu Lys Pro Tyr Thr Cys Ser Glu Cys Gly Lys  
 210 215 220  
 Asp Phe Arg Leu Asn Ser His Leu Ile Gln His Gln Arg Ile His Thr  
 225 230 235 240  
 Gly Glu Lys Ala His Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln  
 245 250 255  
 Thr Ser Cys Leu Ile Gln His His Lys Met His Arg Lys Glu Lys Ser



出証特 2 0 0 4 - 3 0 5 9 6 6 1

Ser Ser Leu Asp Ser Tyr Ser Lys Asp Gly Ala Lys Ser Leu Lys Gly  
100 105 110  
Asp Val Pro Ala Ser Glu Val Thr Leu Lys Asp Ser Thr Phe Ser Gln  
115 120 125  
Phe Ser Pro Ile Ser Ser Ala Glu Glu Phe Asp Asp Asp Glu Lys Ile  
130 135 140  
Glu Val Asp Asp Pro Pro Asp Lys Glu Asp Met Arg Ser Ser Phe Arg  
145 150 155 160  
Ser Asn Val Leu Thr Gly Ser Ala Pro Gln Gln Asp Tyr Asp Lys Leu  
165 170 175  
Lys Ala Leu Gly Gly Glu Asn Ser Ser Lys Thr Gly Leu Ser Thr Ser  
180 185 190  
Gly Asn Val Glu Lys Asn Lys Ala Val Lys Arg Glu Thr Glu Ala Ser  
195 200 205  
Ser Ile Asn Leu Ser Val Tyr Glu Pro Phe Lys Val Arg Lys Ala Glu  
210 215 220  
Asp Lys Leu Lys Glu Ser Ser Asp Lys Val Leu Glu Asn Arg Val Leu  
225 230 235 240  
Asp Gly Lys Leu Ser Ser Glu Lys Asn Asp Thr Ser Leu Pro Ser Val  
245 250 255  
Ala Pro Ser Lys Thr Lys Ser Ser Ser Lys Leu Ser Ser Cys Ile Ala  
260 265 270  
Ala Ile Ala Ala Leu Ser Ala Lys Lys Ala Ala Ser Asp Ser Cys Lys  
275 280 285  
Glu Pro Val Ala Asn Ser Arg Glu Ser Ser Pro Leu Pro Lys Glu Val  
290 295 300  
Asn Asp Ser Pro Arg Ala Ala Asp Lys Ser Pro Glu Ser Gln Asn Leu  
305 310 315 320  
Ile Asp Gly Thr Lys Lys Pro Ser Leu Lys Gln Pro Asp Ser Pro Arg

325	330	335
Ser Ile Ser Ser Glu Asn Ser Ser Lys Gly Ser Pro Ser Ser Pro Ala		
340	345	350
Gly Ser Thr Pro Ala Ile Pro Lys Val Arg Ile Lys Thr Ile Lys Thr		
355	360	365
Ser Ser Gly Glu Ile Lys Arg Thr Val Thr Arg Val Leu Pro Glu Val		
370	375	380
Asp Leu Asp Ser Gly Lys Lys Pro Ser Glu Gln Thr Ala Ser Val Met		
385	390	395
400		
Ala Ser Val Thr Ser Leu Leu Ser Ser Pro Ala Ser Ala Ala Val Leu		
405	410	415
Ser Ser Pro Pro Arg Ala Pro Leu Gln Ser Ala Val Val Thr Asn Ala		
420	425	430
Val Ser Pro Ala Glu Leu Thr Pro Lys Gln Val Thr Ile Lys Pro Val		
435	440	445
Ala Thr Ala Phe Leu Pro Val Ser Ala Val Lys Thr Ala Gly Ser Gln		
450	455	460
Val Ile Asn Leu Lys Leu Ala Asn Asn Thr Thr Val Lys Ala Thr Val		
465	470	475
480		
Ile Ser Ala Ala Ser Val Gln Ser Ala Ser Ser Ala Ile Ile Lys Ala		
485	490	495
Ala Asn Ala Ile Gln Gln Gln Thr Val Val Val Pro Ala Ser Ser Leu		
500	505	510
Ala Asn Ala Lys Leu Val Pro Lys Thr Val His Leu Ala Asn Leu Asn		
515	520	525
Leu Leu Pro Gln Gly Ala Gln Ala Thr Ser Glu Leu Arg Gln Val Leu		
530	535	540
Thr Lys Pro Gln Gln Gln Ile Lys Gln Ala Ile Ile Asn Ala Ala Ala		
545	550	555
560		

Ser Gln Pro Pro Lys Lys Val Ser Arg Val Gln Val Val Ser Ser Leu  
 565 570 575  
 Gln Ser Ser Val Val Glu Ala Phe Asn Lys Val Leu Ser Ser Val Asn  
 580 585 590  
 Pro Val Pro Val Tyr Ile Pro Asn Leu Ser Pro Pro Ala Asn Ala Gly  
 595 600 605  
 Ile Thr Leu Pro Thr Arg Gly Tyr Lys Cys Leu Glu Cys Gly Asp Ser  
 610 615 620  
 Phe Ala Leu Glu Lys Ser Leu Thr Gln His Tyr Asp Arg Arg Ser Val  
 625 630 635 640  
 Arg Ile Glu Val Thr Cys Asn His Cys Thr Lys Asn Leu Val Phe Tyr  
 645 650 655  
 Asn Lys Cys Ser Leu Leu Ser His Ala Arg Gly His Lys Glu Lys Gly  
 660 665 670  
 Val Val Met Gln Cys Ser His Leu Ile Leu Lys Pro Val Pro Ala Asp  
 675 680 685  
 Gln Met Ile Val Ser Pro Ser Ser Asn Thr Ser Thr Ser Thr Ser Thr  
 690 695 700  
 Leu Gln Ser Pro Val Gly Ala Gly Thr His Thr Val Thr Lys Ile Gln  
 705 710 715 720  
 Ser Gly Ile Thr Gly Thr Val Ile Ser Ala Pro Ser Ser Thr Pro Ile  
 725 730 735  
 Thr Pro Ala Met Pro Leu Asp Glu Asp Pro Ser Lys Leu Cys Arg His  
 740 745 750  
 Ser Leu Lys Cys Leu Glu Cys Asn Glu Val Phe Gln Asp Glu Thr Ser  
 755 760 765  
 Leu Ala Thr His Phe Gln Gln Ala Ala Asp Thr Ser Gly Gln Lys Thr  
 770 775 780  
 Cys Thr Ile Cys Gln Met Leu Leu Pro Asn Gln Cys Ser Tyr Ala Ser

785                      790                      795                      800  
His Gln Arg Ile His Gln His Lys Ser Pro Tyr Thr Cys Pro Glu Cys  
                         805                      810                      815  
Gly Ala Ile Cys Arg Ser Val His Phe Gln Thr His Val Thr Lys Asn  
                         820                      825                      830  
Cys Leu His Tyr Thr Arg Arg Val Gly Phe Arg Cys Val His Cys Asn  
                         835                      840                      845  
Val Val Tyr Ser Asp Val Ala Ala Leu Lys Ser His Ile Gln Gly Ser  
                         850                      855                      860  
His Cys Glu Val Phe Tyr Lys Cys Pro Ile Cys Pro Met Ala Phe Lys  
865                      870                      875                      880  
Ser Ala Pro Ser Thr His Ser His Ala Tyr Thr Gln His Pro Gly Ile  
                         885                      890                      895  
Lys Ile Gly Glu Pro Lys Ile Ile Tyr Lys Cys Ser Met Cys Asp Thr  
                         900                      905                      910  
Val Phe Thr Leu Gln Thr Leu Leu Tyr Arg His Phe Asp Gln His Ile  
                         915                      920                      925  
Glu Asn Gln Lys Val Ser Val Phe Lys Cys Pro Asp Cys Ser Leu Leu  
                         930                      935                      940  
Tyr Ala Gln Lys Gln Leu Met Met Asp His Ile Lys Ser Met His Gly  
945                      950                      955                      960  
Thr Leu Lys Ser Ile Glu Gly Pro Pro Asn Leu Gly Ile Asn Leu Pro  
                         965                      970                      975  
Leu Ser Ile Lys Pro Ala Thr Gln Asn Ser Ala Asn Gln Asn Lys Glu  
                         980                      985                      990  
Asp Thr Lys Ser Met Asn Gly Lys Glu Lys Leu Glu Lys Lys Ser Pro  
                         995                      1000                      1005  
Ser Pro Val Lys Lys Ser Met Glu Thr Lys Lys Val Ala Ser Pro Gly  
1010                      1015                      1020

Trp Thr Cys Trp Glu Cys Asp Cys Leu Phe Met Gln Arg Asp Val Tyr  
1025 1030 1035 1040  
Ile Ser His Val Arg Lys Glu His Gly Lys Gln Met Lys Lys His Pro  
1045 1050 1055  
Cys Arg Gln Cys Asp Lys Pro Phe Ser Ser Ser His Ser Leu Cys Arg  
1060 1065 1070  
His Asn Arg Ile Lys His Lys Gly Ile Arg Lys Val Tyr Ala Cys Ser  
1075 1080 1085  
His Cys Pro Asp Ser Arg Arg Thr Phe Thr Lys Arg Leu Met Leu Glu  
1090 1095 1100  
Lys His Val Gln Leu Met His Gly Ile Lys Asp Pro Asp Leu Lys Glu  
1105 1110 1115 1120  
Met Thr Asp Ala Thr Asn Glu Glu Glu Thr Glu Ile Lys Glu Asp Thr  
1125 1130 1135  
Lys Val Pro Ser Pro Lys Arg Lys Leu Glu Glu Pro Val Leu Glu Phe  
1140 1145 1150  
Arg Pro Pro Arg Gly Ala Ile Thr Gln Pro Leu Lys Lys Leu Lys Ile  
1155 1160 1165  
Asn Val Phe Lys Val His Lys Cys Ala Val Cys Gly Phe Thr Thr Glu  
1170 1175 1180  
Asn Leu Leu Gln Phe His Glu His Ile Pro Gln His Lys Ser Asp Gly  
1185 1190 1195 1200  
Ser Ser Tyr Gln Cys Arg Glu Cys Gly Leu Cys Tyr Thr Ser His Val  
1205 1210 1215  
Ser Leu Ser Arg His Leu Phe Ile Val His Lys Leu Lys Glu Pro Gln  
1220 1225 1230  
Pro Val Ser Lys Gln Asn Gly Ala Gly Glu Asp Asn Gln Gln Glu Asn  
1235 1240 1245  
Lys Pro Ser His Glu Asp Glu Ser Pro Asp Gly Ala Val Ser Asp Arg

1250                      1255                      1260  
 Lys Cys Lys Val Cys Ala Lys Thr Phe Glu Thr Glu Ala Ala Leu Asn  
 1265                      1270                      1275                      1280  
 Thr His Met Arg Thr His Gly Met Ala Phe Ile Lys Ser Lys Arg Met  
                          1285                      1290                      1295  
 Ser Ser Ala Glu Lys  
                          1300

<210> 3293

<211> 1243

<212> PRT

<213> Homo sapiens

<400> 3293

Met Glu Asn Cys Ser Ala Ala Ser Thr Phe Leu Thr Asp Ser Leu Glu  
     1                      5                      10                      15  
 Leu Glu Leu Gly Thr Glu Trp Cys Lys Pro Pro Tyr Phe Ser Cys Ala  
                          20                      25                      30  
 Val Asp Asn Arg Gly Gly Gly Lys His Phe Ser Gly Glu Ser Tyr Leu  
                          35                      40                      45  
 Cys Ser Gly Ala Leu Lys Arg Leu Ile Leu Asn Leu Asp Pro Leu Pro  
                          50                      55                      60  
 Thr Asn Phe Glu Glu Asp Thr Leu Glu Ile Phe Gly Ile Gln Trp Val  
     65                      70                      75                      80  
 Thr Glu Thr Ala Leu Val Asn Ser Ser Arg Glu Leu Phe His Leu Phe  
                          85                      90                      95  
 Arg Gln Gln Leu Tyr Asn Leu Glu Thr Leu Leu Gln Ser Ser Cys Asp  
                          100                      105                      110

Phe Gly Lys Val Ser Thr Leu His Cys Lys Ala Asp Asn Ile Arg Gln  
115 120 125  
Gln Cys Val Leu Phe Leu His Tyr Val Lys Val Phe Ile Phe Arg Tyr  
130 135 140  
Leu Lys Val Gln Asn Ala Glu Ser His Val Pro Val His Pro Tyr Glu  
145 150 155 160  
Ala Leu Glu Ala Gln Leu Pro Ser Val Leu Ile Asp Glu Leu His Gly  
165 170 175  
Leu Leu Leu Tyr Ile Gly His Leu Ser Glu Leu Pro Ser Val Asn Ile  
180 185 190  
Gly Ala Phe Val Asn Gln Asn Gln Ile Lys Leu Phe Pro Pro Ser Trp  
195 200 205  
His Leu Leu His Leu His Leu Asp Ile His Trp Leu Val Leu Glu Ile  
210 215 220  
Leu Tyr Met Leu Gly Glu Lys Leu Lys Gln Val Val Tyr Gly His Gln  
225 230 235 240  
Phe Met Asn Leu Ala Ser Asp Asn Leu Thr Asn Ile Ser Leu Phe Glu  
245 250 255  
Glu His Cys Glu Thr Leu Leu Cys Asp Leu Ile Ser Leu Ser Leu Asn  
260 265 270  
Arg Tyr Asp Lys Val Arg Ser Ser Glu Ser Leu Met Ser Asp Gln Cys  
275 280 285  
Pro Cys Leu Arg Ile Lys Glu Leu Trp Val Leu Leu Ile His Leu Leu  
290 295 300  
Asp His Arg Ser Lys Trp Phe Val Ser Glu Ser Phe Trp Asn Trp Leu  
305 310 315 320  
Asn Lys Leu Leu Lys Thr Leu Leu Glu Lys Ser Ser Asp Arg Arg Arg  
325 330 335  
Ser Ser Met Pro Val Ile Gln Ser Arg Asp Pro Leu Gly Phe Ser Trp



340 345 350  
Trp Ile Ile Thr His Val Ala Ser Phe Tyr Lys Phe Asp Arg His Gly  
355 360 365  
Val Pro Asp Glu Met Arg Lys Val Glu Ser Asn Trp Asn Phe Val Glu  
370 375 380  
Glu Leu Leu Lys Lys Ser Ile Ser Val Gln Gly Val Ile Leu Glu Glu  
385 390 395 400  
Gln Leu Arg Met Tyr Leu His Cys Cys Leu Thr Leu Cys Asp Phe Trp  
405 410 415  
Glu Pro Asn Ile Ala Ile Val Thr Ile Leu Trp Glu Tyr Tyr Ser Lys  
420 425 430  
Asn Leu Asn Ser Ser Phe Ser Ile Ser Trp Leu Pro Phe Lys Gly Leu  
435 440 445  
Ala Asn Thr Met Lys Ser Pro Leu Ser Met Leu Glu Met Val Lys Thr  
450 455 460  
Cys Cys Cys Asp Lys Gln Asp Gln Glu Leu Tyr Lys Ser Ser Ser Ser  
465 470 475 480  
Tyr Thr Ile Phe Leu Cys Ile Leu Ala Lys Val Val Lys Lys Ala Met  
485 490 495  
Lys Ser Asn Gly Pro His Pro Trp Lys Gln Val Lys Gly Arg Ile Tyr  
500 505 510  
Ser Lys Phe His Gln Lys Arg Met Glu Glu Leu Thr Glu Val Gly Leu  
515 520 525  
Gln Asn Phe Phe Ser Leu Phe Leu Leu Leu Ala Ala Val Ala Glu Val  
530 535 540  
Glu Asp Val Ala Ser His Val Leu Asp Leu Leu Asn Phe Leu Lys Pro  
545 550 555 560  
Ala Phe Val Met Ser Gln Arg Ala Leu Ile Trp Lys Gly His Met Ala  
565 570 575

Phe Leu Leu Met Tyr Ala Gln Lys Asn Leu Asp Ile Gly Val Leu Ala  
580 585 590  
Glu Lys Phe Ser Cys Ala Phe Arg Glu Lys Ala Lys Glu Phe Leu Val  
595 600 605  
Ser Lys Asn Glu Glu Met Val Gln Arg Gln Thr Ile Trp Thr Leu Leu  
610 615 620  
Ser Ile Tyr Ile Asp Gly Val Gln Glu Val Phe Glu Thr Ser Tyr Cys  
625 630 635 640  
Leu Tyr Pro Ser His Glu Lys Leu Leu Asn Asp Gly Phe Ser Met Leu  
645 650 655  
Leu Arg Ala Cys Arg Glu Ser Glu Leu Arg Thr Val Leu Ser Phe Leu  
660 665 670  
Gln Ala Val Leu Ala Arg Ile Arg Ser Met His Gln Gln Leu Cys Gln  
675 680 685  
Glu Leu Gln Arg Asp Asn Val Asp Leu Phe Val Gln Ser Ser Leu Ser  
690 695 700  
Ala Lys Glu Arg His Leu Ala Ala Val Ala Ser Ala Leu Trp Arg His  
705 710 715 720  
Phe Phe Ser Phe Leu Lys Ser Gln Arg Met Ser Gln Val Val Pro Phe  
725 730 735  
Ser Gln Leu Ala Asp Ala Ala Ala Asp Phe Thr Leu Leu Ala Met Asp  
740 745 750  
Met Pro Ser Thr Ala Pro Ser Asp Phe Gln Pro Gln Pro Val Ile Ser  
755 760 765  
Ile Ile Gln Leu Phe Gly Trp Asp Asp Ile Ile Cys Pro Gln Val Val  
770 775 780  
Ala Arg Tyr Leu Ser His Val Leu Gln Asn Ser Thr Leu Cys Glu Ala  
785 790 795 800  
Leu Ser His Ser Gly Tyr Val Ser Phe Gln Ala Leu Thr Val Arg Ser

805	810	815
Trp Ile Arg Cys Val Leu Gln Met Tyr Ile Lys Asn Leu Ser Gly Pro		
820	825	830
Asp Asp Leu Leu Ile Asp Lys Asn Leu Glu Glu Ala Val Glu Lys Glu		
835	840	845
Tyr Met Lys Gln Leu Val Lys Leu Thr Arg Leu Leu Phe Asn Leu Ser		
850	855	860
Glu Val Lys Ser Ile Phe Ser Lys Ala Gln Ala Glu Tyr Leu Ser Ile		
865	870	875
Ser Glu Asp Pro Lys Lys Ala Leu Val Arg Phe Phe Glu Ala Val Gly		
885	890	895
Val Thr Tyr Gly Asn Val Gln Thr Leu Ser Asp Lys Ser Ala Met Val		
900	905	910
Thr Lys Ser Leu Glu Tyr Leu Gly Glu Val Leu Lys Tyr Ile Lys Pro		
915	920	925
Tyr Leu Gly Lys Lys Val Phe Ser Ala Gly Leu Gln Leu Thr Tyr Gly		
930	935	940
Met Met Gly Ile Leu Val Lys Ser Trp Ala Gln Ile Phe Ala Thr Ser		
945	950	955
Lys Ala Gln Lys Leu Leu Phe Arg Ile Ile Asp Cys Leu Leu Leu Pro		
965	970	975
His Ala Val Leu Gln Gln Glu Lys Glu Leu Pro Ala Pro Met Leu Ser		
980	985	990
Ala Ile Gln Lys Ser Leu Pro Leu Tyr Leu Gln Gly Met Cys Ile Val		
995	1000	1005
Cys Cys Gln Ser Gln Asn Pro Asn Ala Tyr Leu Asn Gln Leu Leu Gly		
1010	1015	1020
Asn Val Ile Glu Gln Tyr Ile Gly Arg Phe Leu Pro Ala Ser Pro Tyr		
1025	1030	1035
		1040

Val Ser Asp Leu Gly Gln His Pro Val Leu Leu Ala Leu Arg Asn Thr  
1045 1050 1055  
Ala Thr Ile Pro Pro Ile Ser Ser Leu Lys Lys Cys Ile Val Gln Val  
1060 1065 1070  
Ile Arg Lys Ser Tyr Leu Glu Tyr Lys Gly Ser Ser Pro Pro Pro Arg  
1075 1080 1085  
Leu Ala Ser Ile Leu Ala Phe Ile Leu Gln Leu Phe Lys Glu Thr Asn  
1090 1095 1100  
Thr Asp Ile Tyr Glu Val Glu Leu Leu Leu Pro Gly Ile Leu Lys Cys  
1105 1110 1115 1120  
Leu Val Leu Val Ser Glu Pro Gln Val Lys Arg Leu Ala Thr Glu Asn  
1125 1130 1135  
Leu Gln Tyr Met Val Lys Ala Cys Gln Val Gly Ser Glu Glu Glu Pro  
1140 1145 1150  
Ser Ser Gln Leu Thr Ser Val Phe Arg Gln Phe Ile Gln Asp Tyr Gly  
1155 1160 1165  
Met Arg Tyr Tyr Tyr Gln Val Tyr Ser Ile Leu Glu Thr Val Ala Thr  
1170 1175 1180  
Leu Asp Gln Gln Val Val Ile His Leu Ile Ser Thr Leu Thr Gln Ser  
1185 1190 1195 1200  
Leu Lys Asp Ser Glu Gln Lys Trp Gly Leu Gly Arg Asn Ile Ala Gln  
1205 1210 1215  
Arg Glu Ala Tyr Ser Lys Leu Leu Ser His Leu Gly Gln Met Gly Gln  
1220 1225 1230  
Asp Glu Met Gln Arg Leu Glu Asn Asp Asn Thr  
1235 1240

&lt;210&gt; 3294

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3294

Met Ala Ala Val Leu Ala Tyr Cys Asn Leu His Leu Pro Gly Ser Ser

1 5 10 15

Asp Ser Ala Ser Ala Ser Leu Val Ala Gly Ile Thr Gly Val Ser Gln

20 25 30

His Thr Gln Leu Val Phe Val Phe Leu Val Glu Thr Gly Phe His His

35 40 45

Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Leu Ala Ser Gln

50 55 60

Asn Ala Gly Ile Ile Gly Val Ser His Gly Thr Trp Pro Asn Thr Thr

65 70 75 80

Phe Asn Tyr His Phe His Phe Leu Leu Val Gln Glu Lys Ala Tyr Thr

85 90 95

Phe Ile Gln His Val Tyr Leu Gly Arg Thr Ser His Tyr Pro Asp Val

100 105 110

His Tyr Phe Asp His His Asp Arg Ala Asp Tyr Ser Ala Met

115 120 125

&lt;210&gt; 3295

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3295

Met Glu Ala Asp Ser Pro Ala Gly Pro Gly Ala Pro Glu Pro Leu Ala  
 1 5 10 15  
 Glu Gly Ala Ala Ala Glu Phe Ser Ser Leu Leu Arg Arg Ile Lys Gly  
 20 25 30  
 Lys Leu Phe Thr Trp Asn Ile Leu Lys Thr Ile Ala Leu Gly Gln Met  
 35 40 45  
 Leu Ser Leu Cys Ile Cys Gly Thr Ala Ile Thr Ser Gln Tyr Leu Ala  
 50 55 60  
 Glu Arg Tyr Lys Val Asn Thr Pro Met Leu Gln Ser Phe Ile Asn Tyr  
 65 70 75 80  
 Cys Leu Leu Phe Leu Ile Tyr Thr Val Met Leu Ala Phe Arg Ser Gly  
 85 90 95  
 Ser Asp Asn Leu Leu Val Ile Leu Lys Arg Lys Trp Trp Lys Tyr Ile  
 100 105 110  
 Leu Leu Gly Leu Ala Asp Val Glu Ala Asn Tyr Val Ile Val Arg Ala  
 115 120 125  
 Tyr Gln Tyr Thr Thr Leu Thr Ser Val Gln Leu Leu Asp Cys Phe Gly  
 130 135 140  
 Ile Pro Val Leu Met Ala Leu Ser Trp Phe Ile Leu His Ala Arg Tyr  
 145 150 155 160  
 Arg Val Ile His Phe Ile Ala Val Ala Val Cys Leu Leu Gly Val Gly  
 165 170 175  
 Thr Met Val Gly Ala Asp Ile Leu Ala Gly Arg Glu Asp Asn Ser Gly  
 180 185 190  
 Ser Asp Val Leu Ile Gly Asp Ile Leu Val Leu Leu Gly Ala Ser Leu  
 195 200 205  
 Tyr Ala Ile Ser Asn Val Cys Glu Glu Tyr Ile Val Lys Lys Leu Ser  
 210 215 220  
 Arg Gln Glu Phe Leu Gly Met Val Gly Leu Phe Gly Thr Ile Ile Ser

225                      230                      235                      240  
 Gly Ile Gln Leu Leu Ile Val Glu Tyr Lys Asp Ile Ala Ser Ile His  
                                  245                      250                      255  
 Trp Asp Trp Lys Ile Ala Leu Leu Phe Val Ala Phe Ala Leu Cys Met  
                                  260                      265                      270  
 Phe Cys Leu Tyr Ser Phe Met Pro Leu Val Ile Lys Val Thr Ser Ala  
                                  275                      280                      285  
 Thr Ser Val Asn Leu Gly Ile Leu Thr Ala Asp Leu Tyr Ser Leu Phe  
                                  290                      295                      300  
 Val Gly Leu Phe Leu Phe Gly Tyr Lys Asp Ser Thr Ser Cys Pro Ser  
 305                      310                      315                      320  
 Leu Ser Ser Trp Trp Gly Leu Ser Cys Thr Ala Pro Pro Leu Leu Ala  
                                  325                      330                      335  
 Arg Pro Ser Arg Leu Lys Ala Ala Cys Leu Gln Ser Pro Ala Leu Gly  
                                  340                      345                      350  
 Leu Thr Thr Trp Gly  
                                  355

<210> 3296

<211> 587

<212> PRT

<213> Homo sapiens

<400> 3296

Met Gln Leu Leu Tyr Thr Lys Asp Lys Ser Tyr Trp Glu Asp Tyr Arg  
   1                      5                      10                      15  
 Gln Phe Cys Lys Thr Thr Ala Lys Pro Val Lys Ser Leu Thr Gln Leu  
                                  20                      25                      30

Leu Leu Asp Asp Asp Cys Pro Thr Ala Ile Phe Pro Ser Lys Pro Phe  
 35 40 45  
 Leu Gln Arg Cys Phe Pro Asp Phe Ser Thr Lys Asn Gly Thr Leu Thr  
 50 55 60  
 Ile Gly Ser Lys Met Met Phe Gln Asp Gly Asn Gly Gly Thr Arg Ser  
 65 70 75 80  
 Val Val Glu Leu Gly Ile Ala Ala Asn Gly Ile Asn Lys Leu Leu Asp  
 85 90 95  
 Ala Lys Ser Leu Gly Leu Lys Val Phe Glu Asp Tyr Ala Arg Thr Trp  
 100 105 110  
 Tyr Trp Ile Leu Ile Gly Leu Thr Ile Ala Met Val Leu Ser Trp Ile  
 115 120 125  
 Phe Leu Ile Leu Leu Arg Phe Ile Ala Gly Cys Leu Phe Trp Val Phe  
 130 135 140  
 Met Ile Gly Val Ile Gly Ile Ile Gly Tyr Gly Ile Trp His Cys Tyr  
 145 150 155 160  
 Gln Gln Tyr Thr Asn Leu Gln Glu Arg Pro Ser Ser Val Leu Thr Ile  
 165 170 175  
 Tyr Asp Ile Gly Ile Gln Thr Asn Ile Ser Met Tyr Phe Glu Leu Gln  
 180 185 190  
 Gln Thr Trp Phe Thr Phe Met Ile Ile Leu Cys Ile Ile Glu Val Ile  
 195 200 205  
 Val Ile Leu Met Leu Ile Phe Leu Arg Asn Arg Ile Arg Val Ala Ile  
 210 215 220  
 Ile Leu Leu Lys Glu Gly Ser Lys Ala Ile Gly Tyr Val Pro Ser Thr  
 225 230 235 240  
 Leu Val Tyr Pro Ala Leu Thr Phe Ile Leu Leu Ser Ile Cys Ile Cys  
 245 250 255  
 Tyr Trp Val Val Thr Ala Val Phe Leu Ala Thr Ser Gly Val Pro Val



260 265 270  
Tyr Lys Val Ile Ala Pro Gly Gly His Cys Ile His Glu Asn Gln Thr  
275 280 285  
Cys Asp Pro Glu Asn Phe Asn Thr Thr Glu Ile Ala Lys Ala Cys Pro  
290 295 300  
Gly Ala Leu Cys Asn Phe Ala Phe Tyr Gly Gly Lys Ser Leu Tyr His  
305 310 315 320  
Gln Tyr Ile Pro Thr Phe His Val Tyr Asn Leu Phe Val Phe Leu Trp  
325 330 335  
Leu Ile Asn Phe Val Ile Ala Leu Gly Gln Cys Ala Leu Ala Gly Ala  
340 345 350  
Phe Ala Thr Tyr Tyr Trp Ala Met Lys Lys Pro Asp Asp Ile Pro Arg  
355 360 365  
Tyr Pro Leu Phe Thr Ala Phe Gly Arg Ala Ile Arg Tyr His Thr Gly  
370 375 380  
Ser Leu Ala Phe Gly Ser Leu Ile Ile Ala Leu Ile Gln Met Phe Lys  
385 390 395 400  
Ile Val Leu Glu Tyr Leu Asp His Arg Leu Lys Arg Thr Gln Asn Thr  
405 410 415  
Leu Ser Lys Phe Leu Gln Cys Cys Leu Arg Cys Cys Phe Trp Cys Leu  
420 425 430  
Glu Asn Ala Ile Lys Phe Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala  
435 440 445  
Ile Tyr Gly Arg Asn Phe Cys Arg Ser Ala Lys Asp Ala Phe Asn Leu  
450 455 460  
Leu Met Arg Asn Val Leu Lys Val Ala Val Thr Asp Glu Val Thr Tyr  
465 470 475 480  
Phe Val Leu Phe Leu Gly Lys Leu Leu Val Ala Gly Ser Ile Gly Val  
485 490 495

Leu Ala Phe Leu Phe Phe Thr Gln Arg Leu Pro Val Ile Ala Gln Gly  
                   500                                  505                                  510  
 Pro Ala Ser Leu Asn Tyr Tyr Trp Val Pro Leu Leu Thr Val Ile Phe  
                   515                                  520                                  525  
 Gly Ser Tyr Leu Ile Ala His Gly Phe Phe Ser Val Tyr Ala Met Cys  
                   530                                  535                                  540  
 Val Glu Thr Ile Phe Ile Cys Phe Leu Glu Asp Leu Glu Arg Asn Asp  
                   545                                  550                                  555                                  560  
 Gly Ser Thr Ala Arg Pro Tyr Tyr Val Ser Gln Pro Leu Leu Lys Ile  
                                   565                                  570                                  575  
 Phe Gln Glu Glu Asn Pro Gln Thr Arg Lys Gln  
                   580                                  585

&lt;210&gt; 3297

&lt;211&gt; 1022

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3297

Met Leu Pro Gln Val Leu Gly Cys Glu Leu Leu Lys Gly Leu Asn Val  
       1                                  5                                  10                                  15  
 Leu Asp Leu Gly Leu Asn Met Glu Ile Leu Glu Glu Gln Met Leu His  
                   20                                  25                                  30  
 Glu Ile Leu Cys Arg Glu Tyr Pro Glu Leu Glu Thr Arg Trp Gln Asp  
                   35                                  40                                  45  
 Leu Lys Ile Arg Ala Leu Asp Thr Cys Lys Ala Val Glu Ala Ala Glu  
                   50                                  55                                  60  
 Glu Arg Leu Leu Thr Met Leu Leu Phe Gln Asn Pro Lys Arg Gln Lys

65                      70                      75                      80  
Pro Ala Lys Phe Leu Arg Asn Ile Val Arg Ala Gln Gly Lys Leu Cys  
                                 85                      90                      95  
Gln Leu His Ala His Cys Glu Glu Leu Glu Gly Gln Lys Leu Gln Glu  
                                 100                      105                      110  
Met Val Leu Trp Ala Pro Tyr Arg Pro Val Val Trp His Gly Met Ala  
                                 115                      120                      125  
Met Val Lys Ala Leu Ser Gln Leu Gln Asn Leu Leu Pro Leu Phe Cys  
                                 130                      135                      140  
Met Ser Pro Glu Asn Trp Leu Ala Val Thr Lys Gln Ala Leu Asp Ser  
145                      150                      155                      160  
Met Lys Pro Arg Glu Ile Asn His Gly Glu Asp Leu Ala Ser His Leu  
                                 165                      170                      175  
Leu Gln Leu Arg Ala His Leu Thr Arg Gln Leu Leu Gly Ser Thr Val  
                                 180                      185                      190  
Thr Ala Leu Gly Leu Thr Gln Val Pro Leu Val Gly Ala Leu Gly Ala  
                                 195                      200                      205  
Leu Ala Leu Leu Gln Ala Thr Gly Lys Ala Ser Glu Leu Glu Arg Leu  
                                 210                      215                      220  
Ala Leu Trp Pro Gly Leu Ala Ala Ser Pro Ser Thr Val His Ser Lys  
225                      230                      235                      240  
Pro Val Ser Asp Val Ala Arg Pro Ala Trp Leu Gly Pro Lys Ala Trp  
                                 245                      250                      255  
His Glu Cys Glu Met Leu Glu Leu Leu Pro Pro Phe Val Gly Leu Cys  
                                 260                      265                      270  
Ala Ser Leu Ala Gly His Ser Ser Ala Trp Gln Ala Tyr Leu Ser Leu  
                                 275                      280                      285  
Ser Ser Thr Val Leu Gly Pro Ala Pro Gly Pro Gly Pro Glu Pro Leu  
                                 290                      295                      300

Ser Leu Leu Gln Lys Leu Ile Leu Trp Arg Val Leu Arg Pro Glu Cys  
305 310 315 320  
Leu Ala Gly Ala Leu Ala Asp Phe Thr Thr Ser Leu Leu Gly Arg Pro  
325 330 335  
Leu Asp Glu Asn Thr Tyr Ala Pro Thr Met Pro Phe Lys His Ser Gln  
340 345 350  
Ala Thr Gln Pro Met Leu Ile Leu Leu Pro Pro Pro Gly His Pro Ser  
355 360 365  
Ala Thr Leu His Pro Leu Thr Val Ile Gln Lys Leu Ala Ala Lys Tyr  
370 375 380  
Gln Gln Gly Gln Lys Gln Leu Gln Val Ile Ala Leu Gly Ser Glu Ala  
385 390 395 400  
Trp Asp Pro Val Ser Val Val Val Ser Thr Leu Ser Gln Ala Met Tyr  
405 410 415  
Glu Gly His Trp Leu Val Leu Asp Asn Cys His Leu Met Pro His Trp  
420 425 430  
Pro Lys Glu Leu Leu Gln Leu Leu Leu Glu Leu Leu Gly Arg Ala Lys  
435 440 445  
Val Val Ala Asp Leu Glu Ser Glu Gln Leu Leu Asp Gln Pro Glu Ser  
450 455 460  
Arg Asn Val Ser Thr Val His Arg Asp Phe Arg Leu Trp Leu Ile Val  
465 470 475 480  
Pro Ala Glu Ser Ser Ala Ser Leu Pro Ala Val Leu Thr Gln His Ser  
485 490 495  
Met Pro Val Phe Trp Asn Gln Ser Leu Glu Leu Gly His Val Leu Ile  
500 505 510  
Asp Ser Val Glu Leu Ala Gln Gln Val Leu Tyr Met Gln Pro Pro Thr  
515 520 525  
Gln Ala Leu Pro Leu Leu Leu Leu His Gly Leu Leu Leu His Arg Gln

530                                      535                                      540  
Leu Tyr Gly Thr Arg Leu Gln Ala His Arg Gly Arg Trp Ser Gln Val  
545                                      550                                      555                                      560  
Thr Leu Thr Gln Val Leu Gln Thr Gln Asp Gln Leu Trp Ala Ser Leu  
                                    565                                      570                                      575  
Ser Asn Pro Arg Ala Ala Met Gln Glu Leu Ala Ala Ser Val Phe Tyr  
                                    580                                      585                                      590  
Gly Gly Pro Leu Gly Asp Thr Glu Asp Arg Glu Ala Leu Ile Ser Leu  
                                    595                                      600                                      605  
Thr Gln Ala Cys Leu Ser Pro Ser Ser Gly Ser Trp Val Gln Pro His  
                                    610                                      615                                      620  
Thr Pro Gln Ser Leu Leu Ala Thr Leu Met Pro Leu Pro Glu Leu Arg  
625                                      630                                      635                                      640  
Glu Leu Asp Ala Met Ala Glu Cys Lys Ala Gln Met His Leu Leu Pro  
                                    645                                      650                                      655  
Ser Pro Pro Glu Pro Arg Leu Cys Gly Leu Ser Glu Gly Pro Gln Ala  
                                    660                                      665                                      670  
Trp Leu Leu Arg Arg Gln Ser Arg Ala Leu Leu Ser Ala Leu Gln Arg  
                                    675                                      680                                      685  
Ser Ser Pro Val Trp Val Pro Glu Ser Arg Arg Gly Ala Gln Leu Ala  
                                    690                                      695                                      700  
Glu Arg Arg Leu Arg Gln Arg Leu Val Gln Val Asn Arg Arg Leu Glu  
705                                      710                                      715                                      720  
Ser Leu Gln Asp Leu Leu Thr His Val Ile Arg Gln Asp Glu Ser Asp  
                                    725                                      730                                      735  
Ala Pro Trp Ser Val Leu Gly Pro Asn Ala Arg Arg Pro Leu Glu Gly  
                                    740                                      745                                      750  
Val Leu Glu Thr Glu Ala Leu Glu Leu Ser Gln Leu Val Gly Thr Leu  
                                    755                                      760                                      765

Gln Arg Asp Leu Asp Cys Leu Leu Gln Gln Leu Lys Gly Ala Pro Pro  
 770 775 780  
 Cys Pro Ser Arg Arg Cys Ala Ala Val Ala His Ala Leu Trp Thr Gly  
 785 790 795 800  
 Arg Leu Pro Leu Pro Trp Arg Pro His Ala Pro Ala Gly Pro Gln Pro  
 805 810 815  
 Pro Trp His Trp Leu Arg Gln Leu Ser Arg Arg Gly Gln Leu Leu Val  
 820 825 830  
 Arg Tyr Leu Gly Val Gly Ala Asp Ala Ser Ser Asp Val Pro Glu Arg  
 835 840 845  
 Val Phe His Leu Ser Ala Phe Arg His Pro Arg Arg Leu Leu Leu Ala  
 850 855 860  
 Leu Arg Gly Glu Ala Ala Leu Asp Gln Asn Val Pro Ser Ser Asn Phe  
 865 870 875 880  
 Pro Gly Ser Arg Gly Ser Val Ser Ser Gln Leu Gln Tyr Lys Arg Leu  
 885 890 895  
 Glu Met Asn Ser Asn Pro Leu His Phe Arg Val Glu Asn Gly Pro Asn  
 900 905 910  
 Pro Thr Val Pro Glu Arg Gly Leu Leu Leu Ile Gly Leu Gln Val Leu  
 915 920 925  
 His Ala Glu Trp Asp Pro Ile Ala Gly Ala Leu Gln Asp Ser Pro Ser  
 930 935 940  
 Ser Gln Pro Ser Pro Leu Pro Pro Val Ser Ile Ser Thr Gln Ala Pro  
 945 950 955 960  
 Gly Thr Ser Asp Leu Pro Ala Pro Ala Asp Leu Thr Val Tyr Ser Cys  
 965 970 975  
 Pro Val Tyr Met Gly Gly Pro Leu Gly Thr Ala Lys Leu Gln Ser Arg  
 980 985 990  
 Asn Ile Val Met His Leu Pro Leu Pro Thr Lys Leu Thr Pro Asn Thr

995	1000	1005
Cys Val Gln Arg Arg Val His Val Cys Ser Pro Pro Leu Ser		
1010	1015	1020

&lt;210&gt; 3298

&lt;211&gt; 821

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3298

Met	Gln	Ala	Gln	Cys	Thr	Leu	Ile	Asn	Phe	Leu	Val	Thr	Arg	Asp	Gly
1				5					10					15	
Leu	Glu	Asp	Gln	Leu	Leu	Ala	Ala	Val	Val	Ala	Lys	Glu	Arg	Pro	Asp
			20					25					30		
Leu	Glu	Gln	Leu	Glu	Ala	Asn	Leu	Thr	Lys	Ser	Gln	Asn	Glu	Phe	Lys
		35					40					45			
Ile	Val	Leu	Lys	Glu	Leu	Glu	Asp	Ser	Leu	Leu	Ala	Arg	Leu	Ser	Ala
	50					55					60				
Ala	Ser	Gly	Asn	Phe	Leu	Gly	Asp	Thr	Ala	Leu	Val	Glu	Asn	Leu	Glu
65				70					75					80	
Thr	Thr	Lys	His	Thr	Ala	Ser	Glu	Ile	Glu	Glu	Lys	Val	Val	Glu	Ala
			85					90					95		
Lys	Ile	Thr	Glu	Val	Lys	Ile	Asn	Glu	Ala	Arg	Glu	Asn	Tyr	Arg	Pro
		100						105					110		
Ala	Ala	Glu	Arg	Ala	Ser	Leu	Leu	Tyr	Phe	Ile	Leu	Asn	Asp	Leu	Asn
		115					120					125			
Lys	Ile	Asn	Pro	Val	Tyr	Gln	Phe	Ser	Leu	Lys	Ala	Phe	Asn	Val	Val
130							135					140			

Phe Glu Lys Ala Ile Gln Arg Thr Thr Pro Ala Asn Glu Val Lys Gln  
145 150 155 160  
Arg Val Ile Asn Leu Thr Asp Glu Ile Thr Tyr Ser Val Tyr Met Tyr  
165 170 175  
Thr Ala Arg Gly Leu Phe Glu Arg Asp Lys Leu Ile Phe Leu Ala Gln  
180 185 190  
Val Thr Phe Gln Val Leu Ser Met Lys Lys Glu Leu Asn Pro Val Glu  
195 200 205  
Leu Asp Phe Leu Leu Arg Phe Pro Phe Lys Ala Gly Val Val Ser Pro  
210 215 220  
Val Asp Phe Leu Gln His Gln Gly Trp Gly Gly Ile Lys Ala Leu Ser  
225 230 235 240  
Glu Met Asp Glu Phe Lys Asn Leu Asp Ser Asp Ile Glu Gly Ser Ala  
245 250 255  
Lys Arg Trp Lys Lys Leu Val Glu Ser Glu Ala Pro Glu Lys Glu Ile  
260 265 270  
Phe Pro Lys Glu Trp Lys Asn Lys Thr Ala Leu Gln Lys Leu Cys Met  
275 280 285  
Val Arg Cys Leu Arg Pro Asp Arg Met Thr Tyr Ala Ile Lys Asn Phe  
290 295 300  
Val Glu Glu Lys Met Gly Ser Lys Phe Val Glu Gly Arg Ser Val Glu  
305 310 315 320  
Phe Ser Lys Ser Tyr Glu Glu Ser Ser Pro Ser Thr Ser Ile Phe Phe  
325 330 335  
Ile Leu Ser Pro Gly Val Asp Pro Leu Lys Asp Val Glu Ala Leu Gly  
340 345 350  
Lys Lys Leu Gly Phe Thr Ile Asp Asn Gly Lys Leu His Asn Val Ser  
355 360 365  
Leu Gly Gln Gly Gln Glu Val Val Ala Glu Asn Ala Leu Asp Val Ala



370 375 380  
Ala Glu Lys Gly His Trp Val Ile Leu Gln Asn Ile His Leu Val Ala  
385 390 395 400  
Arg Trp Leu Gly Thr Leu Asp Lys Lys Leu Glu Arg Tyr Ser Thr Gly  
405 410 415  
Ser His Glu Asp Tyr Arg Val Phe Ile Ser Ala Glu Pro Ala Pro Ser  
420 425 430  
Pro Glu Thr His Ile Ile Pro Gln Gly Ile Leu Glu Asn Ala Ile Lys  
435 440 445  
Ile Thr Asn Glu Pro Pro Thr Gly Met His Ala Asn Leu His Lys Ala  
450 455 460  
Leu Asp Leu Phe Thr Gln Asp Thr Leu Glu Met Cys Thr Lys Glu Met  
465 470 475 480  
Glu Phe Lys Cys Met Leu Phe Ala Leu Cys Tyr Phe His Ala Val Val  
485 490 495  
Ala Glu Arg Arg Lys Phe Gly Ala Gln Gly Trp Asn Arg Ser Tyr Pro  
500 505 510  
Phe Asn Asn Gly Asp Leu Thr Ile Ser Ile Asn Val Leu Tyr Asn Tyr  
515 520 525  
Leu Glu Ala Asn Pro Lys Val Pro Trp Asp Asp Leu Arg Tyr Leu Phe  
530 535 540  
Gly Glu Ile Met Tyr Gly Gly His Ile Thr Asp Asp Trp Asp Arg Arg  
545 550 555 560  
Leu Cys Arg Thr Tyr Leu Ala Glu Tyr Ile Arg Thr Glu Met Leu Glu  
565 570 575  
Gly Asp Val Leu Leu Ala Pro Gly Phe Gln Ile Pro Pro Asn Leu Asp  
580 585 590  
Tyr Lys Gly Tyr His Glu Tyr Ile Asp Glu Asn Leu Pro Pro Glu Ser  
595 600 605

Pro Tyr Leu Tyr Gly Leu His Pro Asn Ala Glu Ile Gly Phe Leu Thr  
610 615 620  
Val Thr Ser Glu Lys Leu Phe Arg Thr Val Leu Glu Met Gln Pro Lys  
625 630 635 640  
Glu Thr Asp Ser Gly Ala Gly Thr Gly Val Ser Arg Glu Glu Lys Val  
645 650 655  
Lys Ala Val Leu Asp Asp Ile Leu Glu Lys Ile Pro Glu Thr Leu Asn  
660 665 670  
Met Ala Glu Ile Met Ala Lys Ala Ala Glu Lys Thr Pro Tyr Val Val  
675 680 685  
Val Ala Phe Gln Glu Cys Glu Arg Met Asn Ile Leu Thr Asn Glu Met  
690 695 700  
Arg Arg Ser Leu Lys Glu Leu Asn Leu Gly Leu Lys Gly Glu Leu Thr  
705 710 715 720  
Ile Thr Thr Asp Val Glu Asp Leu Ser Thr Ala Leu Phe Tyr Asp Thr  
725 730 735  
Val Pro Asp Thr Trp Val Ala Arg Ala Tyr Pro Ser Met Met Gly Leu  
740 745 750  
Ala Ala Trp Tyr Ala Asp Leu Leu Leu Arg Ile Arg Arg Leu Val Cys  
755 760 765  
Pro Cys Arg Asn Ser Arg Pro Gly Arg Gln Thr Leu Pro Cys Pro Pro  
770 775 780  
Pro Cys Gly Trp Pro Ala Ser Ser Thr Pro Ser Arg Ser Ser Arg Pro  
785 790 795 800  
Ser Cys Ser Pro Trp Pro Gly Arg Thr Ser Gly Pro Trp Thr Arg Cys  
805 810 815  
Val Cys Leu Ser Arg  
820

&lt;210&gt; 3299

&lt;211&gt; 652

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3299

Met Arg Arg Pro Cys Leu Gln Gly Thr Tyr Cys Asp Gln His Thr Asn

1 5 10 15

Leu Cys Tyr Ser Ser Gly Trp Pro Ser Ala Phe Gly Thr Ser Pro Ala

20 25 30

Thr Ser Phe Pro Leu Ala His Gln Ser Pro Gly Thr Ser Pro Val Thr

35 40 45

Ser Pro Gln Leu Thr His Val Pro Leu Glu Thr Gly Pro Met Ile Ser

50 55 60

Pro Pro Pro Thr His Arg Thr Pro Gly Thr Cys Leu Thr Ile Ser Pro

65 70 75 80

Pro Leu Ala Arg Arg Pro Val Glu Thr Ser Pro Met Ala Ser Pro Thr

85 90 95

Leu Ser His Arg Val Leu Glu Thr Gly Leu Met Ile Ser Leu Pro Ser

100 105 110

His Trp Phe Ser Gly Arg Ser Tyr Asn Asp Pro Leu Leu Ser Pro Ala

115 120 125

Ser Ser Pro Pro Thr Gly Ser Phe Tyr His Gly Ser Leu Lys Pro Leu

130 135 140

Asp Ser Cys Glu Pro Lys Pro Gln Leu Asp Leu Pro Leu Glu Lys Asn

145 150 155 160

Cys Cys Gly Phe Pro Leu Ser Ser Gln Ala Gly Met Pro Gly Ser Pro

165 170 175

Ser Ser Pro Gln Glu Gly Ser Tyr His Tyr Ser His Leu Ser Ser Glu  
 180 185 190  
 Ala Tyr Ile Pro Thr Pro Gly Ser Pro Cys Tyr Ala Ile Cys Leu Cys  
 195 200 205  
 Pro Gly Ser Thr Asp Ser Pro Cys Ser Pro Gln Ser Gln Ala Pro Arg  
 210 215 220  
 Lys Ala Cys Ile Glu Ser Leu Leu Ser Trp Glu Ala Thr Gly Asn Ser  
 225 230 235 240  
 Tyr Leu Ile Leu Thr Pro Asp Thr Thr Thr Ser Gly Pro Pro Cys Ser  
 245 250 255  
 Gln Glu Pro Ser Arg Pro His Gly Pro His Ser Val Leu Ser Phe Pro  
 260 265 270  
 Ser Pro Leu Gly Asn Gln Phe Ile Ser Pro Pro Gln Ser Leu Pro Arg  
 275 280 285  
 Arg Ser Tyr Asn Glu Pro Pro Leu Pro Thr Pro Val Ser Pro Gln Pro  
 290 295 300  
 Lys Ser Pro Lys Ser Pro Glu Leu Arg Gln Ser His Thr Pro His Lys  
 305 310 315 320  
 Cys Leu Ser Leu Val Asn Thr Pro Gln His Thr Pro Ser Gly Gln Pro  
 325 330 335  
 Lys Pro Ala Lys Ala His Thr Cys Pro Pro Pro Pro Ser Cys Leu Ser  
 340 345 350  
 Gly Pro Ser Cys Met Gln Pro Tyr Ile Thr Thr Pro Ser Asn Ser Ser  
 355 360 365  
 Pro Lys Glu Leu Pro Pro Gly Thr Thr Leu Leu Thr Val Val Pro Arg  
 370 375 380  
 Ala Leu Lys Ser Val Ile Pro Thr Ser Phe Pro Leu Cys Leu Pro Cys  
 385 390 395 400  
 Asp Pro Val Ser Ala Asn Ser Tyr Ala Gln Ser Ser Arg His Gly Pro

405	410	415
Ser Ile Gly Pro Pro Cys Asn Thr His	Ile Cys Ser Val Val Pro Ser	
420	425	430
Thr Pro His Pro Cys Pro Leu Ser Gly Ser Leu Asn His Ser Thr Gly		
435	440	445
Pro Pro Pro Ile Val Pro Leu Cys Asp Thr Tyr Ser Thr Pro Arg Gly		
450	455	460
Pro Pro Gln Pro Arg Cys Gln Pro Val Met Pro Pro Cys Ser Thr His		
465	470	475
Ile Tyr Ser Phe Ile Pro Leu Arg Thr Pro Phe Asp Pro Gln Ser Leu		
485	490	495
Pro Ile Val Pro Arg Val Arg Ala Tyr Pro Asp Thr Val Pro Cys Gly		
500	505	510
Leu His Ile Tyr Pro Val Ala Ser Gln Gly Pro Cys Lys Glu Pro Leu		
515	520	525
Gln Ile Pro Tyr Ser Cys Pro Leu Pro Ser Ser Lys Asp Ser Ser Cys		
530	535	540
Ser Thr Asn Pro Ser Cys Ser Ser Thr Ile Ile Ser Lys Cys Gln Ser		
545	550	555
Ser Asp Ser Glu Ser Arg Ser Ser His Gln Ser Gln Ser Arg Ser Gln		
565	570	575
Ser Lys Ser Pro His Asp Gly Arg Ser Gln Ser Trp Ser Lys Arg His		
580	585	590
His Leu Ser Arg Ser Pro Ser Gln Lys Ser Ser Pro Tyr Pro Ser Arg		
595	600	605
Ser Trp Gly Arg Ser Ser Asn Pro Gln Gln Asn Thr Ser Gln Gly Gln		
610	615	620
Ser Glu Ser Pro Gln Leu Ser Ile Asn Glu His Gln Gly Glu Ser Pro		
625	630	635
		640

Gln Ile Ser Arg Gly Gln Gly Lys Ser Lys Ser Leu  
645 650

<210> 3300

<211> 495

<212> PRT

<213> Homo sapiens

<400> 3300

Met Ala Lys Arg Pro Gly Pro Pro Gly Ser Arg Glu Met Gly Leu Leu  
1 5 10 15  
Thr Phe Arg Asp Ile Ala Ile Glu Phe Ser Leu Ala Glu Trp Gln Cys  
20 25 30  
Leu Asp His Ala Gln Gln Asn Leu Tyr Arg Asp Val Met Leu Glu Asn  
35 40 45  
Tyr Arg Asn Leu Val Ser Leu Gly Ile Ala Val Ser Lys Pro Asp Leu  
50 55 60  
Ile Thr Cys Leu Glu Gln Asn Lys Glu Pro Gln Asn Ile Lys Arg Asn  
65 70 75 80  
Glu Met Val Ala Lys His Pro Val Thr Cys Ser His Phe Thr Gln Asp  
85 90 95  
Leu Gln Ser Glu Gln Gly Ile Lys Asp Ser Leu Gln Lys Val Ile Leu  
100 105 110  
Arg Arg Tyr Gly Lys Cys Gly Gln Glu Asp Leu Gln Val Lys Lys Cys  
115 120 125  
Cys Lys Ser Val Gly Glu Cys Glu Val His Lys Gly Gly Tyr Asn Tyr  
130 135 140  
Val Asn Gln Cys Leu Ser Ala Thr Gln Asn Lys Thr Phe Gln Thr His

145	150	155	160
Lys Cys Val Lys Val Phe Gly Lys Phe Ser Asn Ser Asn Arg His Lys			
	165	170	175
Thr Arg His Thr Gly Lys Lys His Phe Lys Cys Lys Asn Asp Gly Lys			
	180	185	190
Ser Phe Cys Met Leu Ser Arg Leu Asn Gln His Gln Ile Ile His Thr			
	195	200	205
Arg Glu Lys Ser Tyr Lys Cys Glu Glu Cys Gly Lys Ser Phe Asn Cys			
	210	215	220
Ser Ser Thr Leu Thr Arg His Lys Arg Ile His Thr Gly Glu Lys Pro			
225	230	235	240
Tyr Arg Cys Glu Glu Cys Gly Lys Ala Phe Ser Trp Ser Ala Ser Leu			
	245	250	255
Thr Lys His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Thr Cys Glu			
	260	265	270
Glu Arg Gly Lys Val Phe Ser Arg Ser Thr Leu Thr Asn Tyr Lys Arg			
	275	280	285
Ile His Thr Gly Glu Lys Pro Tyr Thr Cys Glu Glu Cys Gly Lys Ala			
	290	295	300
Phe Ser Arg Ser Ser Thr Leu Thr Asn His Lys Arg Ile His Thr Gly			
305	310	315	320
Glu Arg Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Ser Leu Ser			
	325	330	335
Ser Thr Leu Lys Lys His Lys Ile Val His Thr Gly Glu Lys Leu Tyr			
	340	345	350
Thr Cys Glu Glu Cys Gly Lys Ala Phe Thr Phe Ser Ser Thr Leu Asn			
	355	360	365
Thr His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Thr Cys Glu Glu			
	370	375	380

Cys Gly Lys Ala Phe Ser Leu Pro Ser Thr Phe Thr Tyr His Lys Arg  
 385                      390                      395                      400  
 Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala  
                     405                      410                      415  
 Phe Asn Cys Ser Ser Thr Leu Lys Lys His Lys Ile Ile His Thr Gly  
                     420                      425                      430  
 Glu Lys Leu Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Thr Phe Ser  
                     435                      440                      445  
 Ser Thr Leu Asn Thr His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr  
                     450                      455                      460  
 Lys Cys Glu Glu Cys Asp Gln Thr Phe Lys Trp His Ser Ser Leu Ala  
 465                      470                      475                      480  
 Asn His Lys Asn Met His Thr Gly Glu Lys Pro Tyr Lys Tyr Glu  
                     485                      490                      495

<210> 3301

<211> 513

<212> PRT

<213> Homo sapiens

<400> 3301

Met Ser Ser Lys Pro Glu Pro Lys Asp Val His Gln Leu Asn Gly Thr  
   1                      5                      10                      15  
 Gly Pro Ser Ala Ser Pro Cys Ser Ser Asp Gly Pro Gly Arg Glu Pro  
                     20                      25                      30  
 Leu Ala Gly Thr Ser Glu Phe Leu Gly Pro Asp Gly Ala Gly Val Glu  
                     35                      40                      45  
 Val Val Ile Glu Ser Arg Ala Asn Ala Lys Gly Val Arg Glu Glu Asp



出証特 2 0 0 4 - 3 0 5 9 6 6 1

Pro Leu Val Cys Ala Phe Phe Val Ala Leu Leu Pro Val Trp Val Val  
 290 295 300

Leu Ala Arg Arg Ser Pro Ala Thr Arg Glu Val Leu Tyr Ser Gly Trp  
 305 310 315 320

Glu Pro Val Ile Ile Ala Met Ala Ile Ser Ser Val Gly Gly Leu Ile  
 325 330 335

Leu Asp Lys Thr Val Ser Asp Pro Asn Phe Ala Gly Met Ala Val Phe  
 340 345 350

Thr Pro Val Ile Asn Gly Val Gly Gly Asn Leu Val Ala Val Gln Ala  
 355 360 365

Ser Arg Ile Ser Thr Phe Leu His Met Asn Gly Met Pro Gly Glu Asn  
 370 375 380

Ser Glu Gln Ala Pro Arg Arg Cys Pro Ser Pro Cys Thr Thr Phe Phe  
 385 390 395 400

Ser Pro Asp Val Asn Ser Arg Ser Ala Arg Val Leu Phe Leu Leu Val  
 405 410 415

Val Pro Gly His Leu Val Phe Leu Tyr Thr Ile Ser Cys Met Gln Gly  
 420 425 430

Gly His Thr Thr Leu Thr Leu Ile Phe Ile Ile Phe Tyr Met Thr Ala  
 435 440 445

Ala Leu Leu Gln Val Leu Ile Leu Leu Tyr Ile Ala Asp Trp Met Val  
 450 455 460

His Trp Met Trp Gly Arg Gly Leu Asp Pro Asp Asn Phe Ser Ile Pro  
 465 470 475 480

Tyr Leu Thr Ala Leu Gly Asp Leu Leu Gly Thr Gly Leu Leu Ala Leu  
 485 490 495

Ser Phe His Val Leu Trp Leu Ile Gly Asp Arg Asp Thr Asp Val Gly  
 500 505 510

Asp

&lt;210&gt; 3302

&lt;211&gt; 663

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3302

Met Ala Ala Thr Glu Ile Ser Val Leu Ser Glu Gln Phe Thr Lys Ile

1 5 10 15

Lys Glu Leu Glu Leu Met Pro Glu Lys Gly Leu Lys Glu Glu Glu Lys

20 25 30

Asp Gly Val Cys Arg Glu Lys Asp His Arg Ser Pro Ser Glu Leu Glu

35 40 45

Ala Glu Arg Thr Ser Gly Ala Phe Gln Asp Ser Val Leu Glu Glu Glu

50 55 60

Val Glu Leu Val Leu Ala Pro Ser Glu Glu Ser Glu Lys Tyr Ile Leu

65 70 75 80

Thr Leu Gln Thr Val His Phe Thr Ser Glu Ala Val Glu Leu Gln Asp

85 90 95

Met Ser Leu Leu Ser Ile Gln Gln Gln Glu Gly Val Gln Val Val Val

100 105 110

Gln Gln Pro Gly Pro Gly Leu Leu Trp Leu Glu Glu Gly Pro Arg Gln

115 120 125

Ser Leu Gln Gln Cys Val Ala Ile Ser Ile Gln Gln Glu Leu Tyr Ser

130 135 140

Pro Gln Glu Met Glu Val Leu Gln Phe His Ala Leu Glu Glu Asn Val

145 150 155 160

Met Val Ala Ser Glu Asp Ser Lys Leu Ala Val Ser Leu Ala Glu Thr			
165	170	175	
Ala Gly Leu Ile Lys Leu Glu Glu Glu Gln Glu Lys Asn Gln Leu Leu			
180	185	190	
Ala Glu Arg Thr Lys Glu Gln Leu Phe Phe Val Glu Thr Met Ser Gly			
195	200	205	
Asp Glu Arg Ser Asp Glu Ile Val Leu Thr Val Ser Asn Ser Asn Val			
210	215	220	
Glu Glu Gln Glu Asp Gln Pro Thr Ala Gly Gln Ala Asp Ala Glu Lys			
225	230	235	240
Ala Lys Ser Thr Lys Asn Gln Arg Lys Thr Lys Gly Ala Lys Gly Thr			
245	250	255	
Phe His Cys Asp Val Cys Met Phe Thr Ser Ser Arg Met Ser Ser Phe			
260	265	270	
Asn Arg His Met Lys Thr His Thr Ser Glu Lys Pro His Leu Cys His			
275	280	285	
Leu Cys Leu Lys Thr Phe Arg Thr Val Thr Leu Leu Arg Asn His Val			
290	295	300	
Asn Thr His Thr Gly Thr Arg Pro Tyr Lys Cys Asn Asp Cys Asn Met			
305	310	315	320
Ala Phe Val Thr Ser Gly Glu Leu Val Arg His Arg Arg Tyr Lys His			
325	330	335	
Thr His Glu Lys Pro Phe Lys Cys Ser Met Cys Lys Tyr Ala Ser Val			
340	345	350	
Glu Ala Ser Lys Leu Lys Arg His Val Arg Ser His Thr Gly Glu Arg			
355	360	365	
Pro Phe Gln Cys Cys Gln Cys Ser Tyr Ala Ser Arg Asp Thr Tyr Lys			
370	375	380	
Leu Lys Arg His Met Arg Thr His Ser Gly Glu Lys Pro Tyr Glu Cys			

385                      390                      395                      400  
His Ile Cys His Thr Arg Phe Thr Gln Ser Gly Thr Met Lys Ile His  
                         405                      410                      415  
Ile Leu Gln Lys His Gly Glu Asn Val Pro Lys Tyr Gln Cys Pro His  
                         420                      425                      430  
Cys Ala Thr Ile Ile Ala Arg Lys Ser Asp Leu Arg Val His Met Arg  
                         435                      440                      445  
Asn Leu His Ala Tyr Ser Ala Ala Glu Leu Lys Cys Arg Tyr Cys Ser  
                         450                      455                      460  
Ala Val Phe His Glu Arg Tyr Ala Leu Ile Gln His Gln Lys Thr His  
465                      470                      475                      480  
Lys Asn Glu Lys Arg Phe Lys Cys Lys His Cys Ser Tyr Ala Cys Lys  
                         485                      490                      495  
Gln Glu Arg His Met Thr Ala His Ile Arg Thr His Thr Gly Glu Lys  
                         500                      505                      510  
Pro Phe Thr Cys Leu Ser Cys Asn Lys Cys Phe Arg Gln Lys Gln Leu  
                         515                      520                      525  
Leu Asn Ala His Phe Arg Lys Tyr His Asp Ala Asn Phe Ile Pro Thr  
                         530                      535                      540  
Val Tyr Lys Cys Ser Lys Cys Gly Lys Gly Phe Ser Arg Trp Ile Asn  
545                      550                      555                      560  
Leu His Arg His Ser Glu Lys Cys Gly Ser Gly Glu Ala Lys Ser Ala  
                         565                      570                      575  
Ala Ser Gly Lys Gly Arg Arg Thr Arg Lys Arg Lys Gln Thr Ile Leu  
                         580                      585                      590  
Lys Glu Ala Thr Lys Gly Gln Lys Glu Ala Ala Lys Gly Trp Lys Glu  
                         595                      600                      605  
Ala Ala Asn Gly Asp Glu Ala Ala Ala Glu Glu Ala Ser Thr Thr Lys  
                         610                      615                      620



115	120	125
Pro Leu Val Thr Ala Ala Val Glu Leu Pro Glu Gln Pro Ala Val Thr		
130	135	140
Val Ala Met Glu Leu Thr Glu Gln Pro Val Thr Thr Thr Glu Leu Glu		
145	150	155
Gln Pro Val Gly Met Thr Thr Val Glu His Pro Gly His Pro Glu Val		
165	170	175
Thr Thr Ala Thr Gly Leu Leu Gly Gln Pro Glu Ala Thr Met Val Leu		
180	185	190
Glu Leu Pro Gly Gln Pro Val Ala Thr Thr Ala Leu Glu Leu Pro Gly		
195	200	205
Gln Pro Ser Val Thr Gly Val Pro Glu Leu Pro Gly Leu Pro Ser Ala		
210	215	220
Thr Arg Ala Leu Glu Leu Ser Gly Gln Pro Val Ala Thr Gly Ala Leu		
225	230	235
Glu Leu Pro Gly Pro Leu Met Ala Ala Gly Ala Leu Glu Phe Ser Gly		
245	250	255
Gln Ser Gly Ala Ala Gly Ala Leu Glu Leu Leu Gly Gln Pro Leu Ala		
260	265	270
Thr Gly Val Leu Glu Leu Pro Gly Gln Pro Gly Ala Pro Glu Leu Pro		
275	280	285
Gly Gln Pro Val Ala Thr Val Ala Leu Glu Ile Ser Val Gln Ser Val		
290	295	300
Val Thr Thr Ser Glu Leu Ser Thr Met Thr Val Ser Gln Ser Leu Glu		
305	310	315
Val Pro Ser Thr Thr Ala Leu Glu Ser Tyr Asn Thr Val Ala Gln Glu		
325	330	335
Leu Pro Thr Thr Leu Val Gly Glu Thr Ser Val Thr Val Gly Val Asp		
340	345	350

Pro Leu Met Ala Pro Glu Ser His Ile Leu Ala Ser Asn Thr Met Glu  
355 360 365  
Thr His Ile Leu Ala Ser Asn Thr Met Asp Ser Gln Met Leu Ala Ser  
370 375 380  
Asn Thr Met Asp Ser Gln Met Leu Ala Ser Asn Thr Met Asp Ser Gln  
385 390 395 400  
Met Leu Ala Ser Ser Thr Met Asp Ser Gln Met Leu Ala Thr Ser Ser  
405 410 415  
Met Asp Ser Gln Met Leu Ala Thr Ser Ser Met Asp Ser Gln Met Leu  
420 425 430  
Ala Thr Ser Thr Met Asp Ser Gln Met Leu Ala Thr Ser Ser Met Asp  
435 440 445  
Ser Gln Met Leu Ala Thr Ser Ser Met Asp Ser Gln Met Leu Ala Thr  
450 455 460  
Ser Ser Met Asp Ser Gln Met Leu Ala Thr Ser Ser Met Asp Ser Gln  
465 470 475 480  
Met Leu Ala Thr Ser Thr Met Asp Ser Gln Met Leu Ala Thr Ser Thr  
485 490 495  
Met Asp Ser Gln Met Leu Ala Thr Ser Ser Met Asp Ser Gln Met Leu  
500 505 510  
Ala Ser Gly Thr Met Asp Ser Gln Met Leu Ala Ser Gly Thr Met Asp  
515 520 525  
Ala Gln Met Leu Ala Ser Gly Thr Met Asp Ala Gln Met Leu Ala Ser  
530 535 540  
Ser Thr Gln Asp Ser Ala Met Leu Gly Ser Lys Ser Pro Asp Pro Tyr  
545 550 555 560  
Arg Leu Ala Gln Asp Pro Tyr Arg Leu Ala Gln Asp Pro Tyr Arg Leu  
565 570 575  
Gly His Asp Pro Tyr Arg Leu Gly His Asp Ala Tyr Arg Leu Gly Gln



580	585	590
Asp Pro Tyr Arg Leu Gly His Asp Pro Tyr Arg Leu Thr Pro Asp Pro		
595	600	605
Tyr Arg Met Ser Pro Arg Pro Tyr Arg Ile Ala Pro Arg Ser Tyr Arg		
610	615	620
Ile Ala Pro Arg Pro Tyr Arg Leu Ala Pro Arg Pro Leu Met Leu Ala		
625	630	635
Ser Arg Arg Ser Met Met Met Ser Tyr Ala Ala Glu Arg Ser Met Met		
645	650	655
Ser Ser Tyr Glu Arg Ser Met Met Ser Tyr Glu Arg Ser Met Met Ser		
660	665	670
Pro Met Ala Glu Arg Ser Met Met Ser Ala Tyr Glu Arg Ser Met Met		
675	680	685
Ser Ala Tyr Glu Arg Ser Met Met Ser Pro Met Ala Glu Arg Ser Met		
690	695	700
Met Ser Ala Tyr Glu Arg Ser Met Met Ser Ala Tyr Glu Arg Ser Met		
705	710	715
Met Ser Pro Met Ala Asp Arg Ser Ile Met Ser Met Gly Ala Asp Arg		
725	730	735
Ser Met Met Ser Ser Tyr Ser Ala Ala Asp Arg Ser Met Met Ser Ser		
740	745	750
Tyr Ser Ala Ala Asp Arg Ser Met Met Ser Ser Tyr Thr Ala Asp Arg		
755	760	765
Ser Met Met Ser Met Ala Ala Asp Ser Tyr Thr Asp Ser Tyr Thr Asp		
770	775	780
Thr Tyr Thr Glu Ala Tyr Met Val Pro Pro Leu Pro Pro Glu Glu Pro		
785	790	795
Pro Thr Met Pro Pro Leu Pro Pro Glu Glu Pro Pro Met Thr Pro Pro		
805	810	815

Leu Pro Pro Glu Glu Pro Pro Glu Gly Pro Ala Leu Pro Thr Glu Gln  
820 825 830

Ser Ala Leu Thr Ala Glu Asn Thr Trp Pro Thr Glu Val Pro Ser Leu  
835 840 845

Pro Ser Glu Glu Ser Val Ser Gln Pro Glu Pro Pro Val Ser Gln Ser  
850 855 860

Glu Ile Ser Glu Pro Ser Ala Val Pro Thr Asp Tyr Ser Val Ser Ala  
865 870 875 880

Ser Asp Pro Ser Val Leu Val Ser Glu Ala Ala Val Thr Val Pro Glu  
885 890 895

Pro Pro Pro Glu Pro Glu Ser Ser Ile Thr Leu Thr Pro Val Glu Ser  
900 905 910

Ala Val Val Ala Glu Glu His Glu Val Val Pro Glu Arg Pro Val Thr  
915 920 925

Cys Met Val Ser Glu Thr Pro Ala Met Ser Ala Glu Pro Thr Val Leu  
930 935 940

Ala Ser Glu Pro Pro Val Met Ser Glu Thr Ala Glu Thr Phe Asp Ser  
945 950 955 960

Met Arg Ala Ser Gly His Val Ala Ser Glu Val Ser Thr Ser Leu Leu  
965 970 975

Val Pro Ala Val Thr Thr Pro Val Leu Ala Glu Ser Ile Leu Glu Pro  
980 985 990

Pro Ala Met Ala Ala Pro Glu Ser Ser Ala Met Ala Val Leu Glu Ser  
995 1000 1005

Ser Ala Val Thr Val Leu Glu Ser Ser Thr Val Thr Val Leu Glu Ser  
1010 1015 1020

Ser Thr Val Thr Val Leu Glu Pro Ser Val Val Thr Val Pro Glu Pro  
1025 1030 1035 1040

Pro Val Val Ala Glu Pro Asp Tyr Val Thr Ile Pro Val Pro Val Val

1045	1050	1055	
Ser Ala Leu Glu Pro Ser Val Pro Val Leu Glu Pro Ala Val Ser Val			
1060	1065	1070	
Leu Gln Pro Ser Met Ile Val Ser Glu Pro Ser Val Ser Val Gln Glu			
1075	1080	1085	
Ser Thr Val Thr Val Ser Glu Pro Ala Val Thr Val Ser Glu Gln Thr			
1090	1095	1100	
Gln Val Ile Pro Thr Glu Val Ala Ile Glu Ser Thr Pro Met Ile Leu			
1105	1110	1115	1120
Glu Ser Ser Ile Met Ser Ser His Val Met Lys Gly Ile Asn Leu Ser			
1125	1130	1135	
Ser Gly Asp Gln Asn Leu Ala Pro Glu Ile Gly Met Gln Glu Ile Ala			
1140	1145	1150	
Leu His Ser Gly Glu Glu Pro His Ala Glu Glu His Leu Lys Gly Asp			
1155	1160	1165	
Phe Tyr Glu Ser Glu His Gly Ile Asn Ile Asp Leu Asn Ile Asn Asn			
1170	1175	1180	
His Leu Ile Ala Lys Glu Met Glu His Asn Thr Val Cys Ala Ala Gly			
1185	1190	1195	1200
Thr Ser Pro Val Gly Glu Ile Gly Glu Glu Lys Ile Leu Pro Thr Ser			
1205	1210	1215	
Glu Thr Lys Gln Cys Thr Val Leu Asp Thr Tyr Pro Gly Val Ser Glu			
1220	1225	1230	
Ala Asp Ala Gly Glu Thr Leu Ser Ser Thr Gly Pro Phe Ala Leu Glu			
1235	1240	1245	
Pro Asp Ala Thr Gly Thr Ser Lys Gly Ile Glu Phe Thr Thr Ala Ser			
1250	1255	1260	
Thr Leu Ser Leu Val Asn Lys Tyr Asp Val Asp Leu Ser Leu Thr Thr			
1265	1270	1275	1280

Gln Asp Thr Glu His Asp Met Val Ile Ser Thr Ser Pro Ser Gly Gly

1285

1290

1295

Ser Glu Ala Asp Ile Glu Gly Pro Leu Pro Ala Lys Asp Ile His Leu

1300

1305

1310

Asp Leu Pro Ser Asn Asn Asn Leu Val Ser Lys Asp Thr Glu Glu Pro

1315

1320

1325

Leu Pro Val Lys Glu Ser Asp Gln Thr Leu Ala Ala Leu Leu Ser Pro

1330

1335

1340

Lys Glu Ser Ser Gly Gly Glu Lys Glu Val Pro Pro Pro Pro Lys Glu

1345

1350

1355

1360

Thr Leu Pro Asp Ser Gly Phe Ser Ala Asn Ile Glu Asp Ile Asn Glu

1365

1370

1375

Ala Asp Leu Val Arg Pro Leu Leu Pro Lys Asp Met Glu Arg Leu Thr

1380

1385

1390

Ser Leu Arg Ala Gly Ile Glu Gly Pro Leu Leu Ala Ser Asp Val Gly

1395

1400

1405

Arg Asp Arg Ser Ala Ala Ser Pro Val Val Ser Ser Met Pro Glu Arg

1410

1415

1420

Ala Ser Glu Ser Ser Ser Glu Glu Lys Asp Asp Tyr Glu Ile Phe Val

1425

1430

1435

1440

Lys Val Lys Asp Thr His

1445

&lt;210&gt; 3304

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3304

Met Glu Phe Cys Ser Val Ala Trp Ala Gly Val Gln Cys Ala Ile Ser  
 1 5 10 15  
 Ala His Gly Asn Phe Arg Leu Leu Gly Ser Ser Asp Ser Pro Ala Cys  
 20 25 30  
 Leu Pro Ser Ser Trp Asp Tyr Arg Cys Thr Pro Pro His Leu Ala Asn  
 35 40 45  
 Phe Val Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly  
 50 55 60  
 Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser  
 65 70 75 80  
 Ala Gly Ile Ile Gly Met Ser His Arg Ala Trp Pro Ile Pro Thr Leu  
 85 90 95  
 Leu Arg Ala Thr Gln Ser Lys Ala Thr Gly Ser Lys Tyr Phe Leu Lys  
 100 105 110  
 Gly Pro Glu Asn Lys Ser Val Gly Ser Gln Ala Met Gly Cys Leu Trp  
 115 120 125  
 Arg Pro Pro Asn Ser Ala Leu Glu Val Ala Pro Gln Leu Pro  
 130 135 140

&lt;210&gt; 3305

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3305

Met Trp Gln Glu Asp Arg Ser Cys Trp Lys Phe Leu Leu Thr Gly Leu  
 1 5 10 15